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**HALEY &
ALDRICH**



**REPORT ON
ANNUAL GROUNDWATER MONITORING, 2003
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA**

UNDERGROUND ENGINEERING & ENVIRONMENTAL SOLUTIONS

**REPORT ON
ANNUAL GROUNDWATER MONITORING, 2003
SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA**

by

**Haley & Aldrich, Inc.
Tucson, Arizona**

for

**The Boeing Company
Canoga Park, California**

**File No. 32600/05/10/M442
February 27, 2004**



The Boeing Company
Rocketdyne Propulsion & Power
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VIA FEDERAL EXPRESS

February 27, 2004

In reply refer to 2004RC0632



Jose Kou, Chief
Facilities Management Branch
California Environmental Protection Agency
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201

Subject: Report on Annual Groundwater Monitoring, 2003
Santa Susana Field Laboratory
Ventura County, California

RE: Post-Closure Permit Nos. PC-94/95-3-02 and PC-94/95-3-03

Dear Mr. Kou:

The Boeing Company, Rocketdyne (Rocketdyne) hereby submits the "Report on Annual Groundwater Monitoring, 2003", File No. 32600/05/10/M442, Haley & Aldrich, Inc., dated 27 February 2004. This report describes activities on the groundwater program at the Santa Susana Field Laboratory for the period 01 January 2003 through 31 December 2003.

There are currently 218 monitoring wells, 13 facility water supply wells, and 18 offsite private sources included in the groundwater program at SSFL. Water-producing wells in the monitoring network are sampled according to the 2003 monitoring schedule and groundwater sampling and analysis plans that were included in the 2002 Annual Groundwater Monitoring Report dated 28 February 2003. With the concurrence of DTSC, sample collection at several wells was postponed to accommodate the completion of the C-1 corehole pumping test (DTSC, 2003).

Rocketdyne has five active groundwater treatment systems operating at SSFL in Areas I, II, and III. These include the Alfa, Bravo, STL-IV, and Delta air stripping towers plus one ultraviolet (UV)/peroxidation (H₂O₂) unit. The UV/H₂O₂ unit is

J. Kou (2004RC0632)

February 27, 2004

Page 2

located along the Area I Service Road. The cumulative volume of groundwater extracted and treated through 2003 is approximately 1,746 million gallons.

If you have any questions, please call me at (818) 586-5695.

Sincerely,



A handwritten signature in black ink, appearing to read "Art Lenox".

Art Lenox

Environmental Remediation

Reference: California Department of Toxic Substances Control (DTSC), 2003.
Letter from Jose Kou, DTSC, to Art Lenox, The Boeing Company,
re: "Modification of 2003 and 2004 Groundwater Sampling
Schedule for Area I, Santa Susana Field Laboratory, EPA ID
CAD093365435." 22 December 2003.

AJL:DHC:bjc

Attachment: Distribution

Enclosure: Report on Annual Groundwater Monitoring, 2003
Santa Susana Field Laboratory
Ventura County, California
File No. 32600/05/10/M442, Haley & Aldrich, Inc.,
dated 27 February 2004

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MASTER ACRONYM LIST

AL	action level
CCR	California Code of Regulations
CFOU	Chatsworth Formation Operable Unit
cis-1,2-DCE	cis-1,2-dichloroethene
DHS	(California) Department of Health Services
DTSC	(California) Department of Toxic Substances Control
EPA	(United States) Environmental Protection Agency
FLUTe	Flexible Liner Underground Technologies, LLC
FSDF	Former Sodium Disposal Facility
GWRC	Groundwater Resources Consultants
LUFT	leaking underground fuel tank
MCL	maximum contaminant level
MDA	minimum detectable activity
MDL	method detection limit
mg/l	milligrams per liter
msl	mean sea level
NDMA	n-nitrosodimethylamine
ng/l	nanograms per liter
NPDES	National Pollutant Discharge Elimination System
NSGI	Near-Surface Groundwater Investigation
pCi/l	picoCuries per liter
per mil	parts per thousand
PQL	practical quantitation limit
RMHF	Radioactive Materials Handling Facility
SAP	sampling and analysis plan
SDWA	Safe Drinking Water Act
SSFL	Santa Susana Field Laboratory
TCE	trichloroethene
trans-1,2-DCE	trans-1,2-dichloroethene
ug/l	micrograms per liter
USEPA	United States Environmental Protection Agency
VOC	volatile organic compound

1. INTRODUCTION

This report summarizes the groundwater monitoring and groundwater extraction/treatment activities conducted during 2003 at The Boeing Company, Rocketdyne Propulsion & Power Santa Susana Field Laboratory (SSFL) located in Ventura County, California (Figure 1). This report is intended to fulfill the requirements of multiple regulatory programs at SSFL, which are addressed in the Post-Closure Permits prepared by the California Department of Toxic Substances Control (DTSC), and the Leaking Underground Fuel Tank (LUFT) monitoring program overseen by DTSC. Specific requirements include performance of detection monitoring, evaluation monitoring and interim corrective action monitoring as described in the Facility Post-Closure Permits, and per the requirements of Title 22, Article 6, Sections 66264.97 through 66264.99 of the California Code of Regulations (CCR).

Monitoring activities conducted during the year included:

- measurement of static water levels;
- collection and laboratory analysis of groundwater samples;
- measurement of groundwater extraction/treatment system water levels, pumping rates and volumes; and
- collection and laboratory analysis of water samples from treatment system influent and effluent.

Historic data were reported in the following documents:

- through the year 1999 in the *Annual Groundwater Monitoring Report, Santa Susana Field Laboratory, 1999, Boeing North American, Inc., Rocketdyne Propulsion & Power, Ventura County, California* (Groundwater Resources Consultants, Inc. (GWRC), February 28, 2000);
- year 2000 in the *Report on Annual Groundwater Monitoring, 2000, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2001);
- year 2001 in the *Report on Annual Groundwater Monitoring, 2001, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2002a) and *Report on Appendix IX Groundwater Monitoring, 2001, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2002b);
- year 2002 in the *Report on Annual Groundwater Monitoring, 2002, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2003a), and *Addendum to Report on Annual Groundwater Monitoring, 2002, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2003b);
- the first quarter 2003 in the *Groundwater Monitoring Quarterly Report, First Quarter 2003, January through March 2003, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2003c);
- the second quarter 2003 in the *Groundwater Monitoring Quarterly Report, Second Quarter 2003, April through June 2003, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2003d); and
- the third quarter 2003 in the *Groundwater Monitoring Quarterly Report, Third Quarter 2003, July through September 2003, Santa Susana Field Laboratory, Ventura County, California* (Haley & Aldrich, 2003e).

The scope of this annual report includes the following as required per the Post-Closure Permits and CCR Title 22, Sections 66264.97 through 66264.99:

- A tabular summary of water level measurements;
- Discussion of the rates and direction of groundwater movement;
- A tabular summary of laboratory analyses of water samples;
- A tabular summary of groundwater extraction volumes and extraction well water levels and flow rates;
- A tabular summary of laboratory analyses of permitted treatment system influent and effluent water samples;
- Water level hydrographs;
- A groundwater elevation contour map of the Chatsworth Formation water table surface for November 2003;
- Contaminant concentration posting maps for the year 2003; and
- Contaminant concentration versus time plots from 1994 through 2003.

Additional groundwater data were collected by MWH and Haley & Aldrich in 2003 as part of the Near-Surface Groundwater Investigation (NSGI), the investigation of seeps and springs, the Chatsworth Formation Operable Unit Investigation (CFOU) and the Perchlorate Characterization Work Plan. In general, these data have been, or will be, reported under separate cover and are not presented in this report. When data from these programs are presented in this report, the text or table(s) will explain the exception.

1.1 Report Organization

Groundwater monitoring results, including analytical results and hydraulic head conditions, are presented in Section 2. Data for remedial systems are presented in Section 3.

2. GROUNDWATER MONITORING

This section presents a discussion of analytical results from 2003 groundwater sampling events conducted at SSFL. Monitoring wells, located as shown in Figure 2, were sampled quarterly, semi-annually, or annually in accordance with the current Sampling and Analysis Plan (SAP) for the Facility (GWRC, 1995a, 1995b).

Additional subsurface investigation programs were conducted at SSFL during 2003. As a result of these ongoing investigations, additional information on site geology and groundwater conditions is becoming available. To the extent possible, this new information is incorporated in this report.

Information on groundwater conditions at SSFL is discussed below. Site geology and groundwater units are summarized and illustrated on Figures 3 and 4. Recently collected data in the eastern portion of SSFL indicate the presence of several geologic features that impact groundwater flow (MWH, 2002). The groundwater conditions depicted in this report are subject to change as additional data become available. Groundwater elevation contours for the first encountered water in the Chatsworth Formation, as determined from groundwater level measurements collected during the fourth quarter 2003 sampling event, are shown on Figure 5. Multi-port FLUTE sampling devices were installed in existing wells in the Former Sodium Disposal Facility (FSDF) and in the northeast corner of SSFL over the last three years as part of the CFOU investigation. The elevation of first water in the multi-port devices varies from that previously observed in the open well bores. Accordingly, the actual elevation of first encountered groundwater probably differs from that shown in Figure 5.

Historic precipitation, year 2003 water level measurements, and historic water level hydrographs for select wells are presented in Tables I and II and Appendix A, respectively. Hydrographs representing vertical profiles of 2003 water levels in wells installed with FLUTE systems were prepared by MWH and are presented in Appendix A. Well and piezometer construction details are summarized in Appendix C. FLUTE system construction details are presented in Appendix A.

Groundwater quality results and trends, as presented in Tables III through XIII and XVII, Appendices E and F, and Figures 6 through 22, are discussed in Section 2.2.

2.1 Groundwater Elevations and Flow Conditions

Groundwater occurs at SSFL in the alluvium, weathered bedrock, and unweathered bedrock (GWRC, 1987; Montgomery Watson, 2000a). First-encountered groundwater exists under water table conditions and may be encountered in any of these media. For the purposes of this report, near-surface groundwater is defined as groundwater that is present in the alluvium and weathered bedrock, and groundwater that occurs below the weathered bedrock is referred to as Chatsworth Formation groundwater.

Near-surface groundwater has a limited areal extent at SSFL, typically occurring in narrow alluvial drainages (topographic lows) and broad valleys (e.g., Burro Flats in Area IV).

Where near-surface groundwater exists, the near-surface and Chatsworth Formation groundwater are often times vertically continuous (i.e., not separated by a vadose zone). In this case, the separation of near-surface groundwater and Chatsworth Formation groundwater is a descriptive term only.

Based on data collected to date, perched groundwater exists at a few locations within SSFL (MWH, 2003c). At these locations, a vadose zone within the Chatsworth Formation separates near-surface and Chatsworth Formation groundwater. Groundwater data collection and analysis is continuing and interpretations of existing hydrogeologic conditions will be modified as necessary based on the data collected.

2.1.1 Near-Surface Groundwater

The near-surface groundwater occurs in a thin layer of Quaternary alluvium distributed primarily in the Burro Flats area and along ephemeral drainages and the upper weathered portion of the Chatsworth Formation. The alluvium consists of unconsolidated sand, silt, and clay materials that have been eroded primarily from the surrounding Chatsworth and Santa Susana Formations.

The occurrence of near-surface groundwater is discontinuous at the Facility. Near-surface groundwater is present along ephemeral drainages and in the southern part of Burro Flats. Some portions of the alluvium and upper weathered Chatsworth Formation are saturated only during and immediately following the wet season.

Water level measurements were obtained quarterly from all 92 near-surface groundwater wells during 2003 (Table II, Appendix A). Near-surface groundwater levels during 2003 followed the general historical trend, highest during the late winter and spring rainy season and lowest during the summer and early fall dry months. For the 2003 water year, 25.20 inches of precipitation was measured, approximately 39% above average (Table I). Discharge of water to Facility storage reservoirs and channels as part of site operations also affects groundwater levels in the shallow wells.

Water level data from shallow wells continue to indicate that near-surface groundwater movement is generally a reflection of surface topography. Groundwater movement within the canyon areas, where most of the near-surface groundwater occurs, is generally in the same direction as surface flow in the canyons. Downward vertical movement of near-surface groundwater into the Chatsworth Formation bedrock also occurs.

2.1.2 Chatsworth Formation

The principal water bearing system at the Facility is the fractured Chatsworth Formation composed of poorly- to well-cemented, massive sandstone with interbeds of siltstone and claystone. Several structural features are apparent at the site including the Shear Zone, trending to the northeast through Area I, and several faults. These major features appear to compartmentalize groundwater flow within delineated units as depicted on Figure 5 (Montgomery Watson, 2000a; MWH, 2002). As indicated

above, studies currently in progress indicate several additional geologic features are present at SSFL which influence groundwater flow, including faults and shale beds. These features are not depicted on Figure 5, since they have not as yet been completely defined.

2.1.2.1 Groundwater Elevations and Flow Conditions

Water level measurements were obtained quarterly from all 126 Chatsworth Formation monitor wells during 2003 (Table II, Appendix A). Access to measure water levels was not available at wells with FLUTE systems installed. Discrete depth-interval water level data from FLUTE wells are presented in Table II and Appendix A. Water levels from the shallowest well in each Chatsworth Formation cluster (or from individual Chatsworth Formation wells at non-cluster locations) obtained in November 2003 were used to prepare the water table contour map presented as Figure 5.

Chatsworth Formation water levels during the fourth quarter 2003 were generally higher than fourth quarter 2002 water levels. This year to year increase was the result of increased precipitation in 2003, and below normal precipitation in 2002. Annual precipitation in 2003 was above the annual average. As noted above, recent field investigations have resulted in the installation of several multi-port sampling devices (FLUTES) in existing wells in the northeast portion and FSDF area of SSFL. The elevation of first water in the multi-port varies from that previously observed in the open well bores. Accordingly, the actual elevation of first encountered groundwater probably differs from that shown in Figure 5.

The determination of groundwater flow rates and direction are required per Title 22 Section 66264.97 of the California Code of Regulations. A groundwater table contour map is included in the annual report (Figure 5) to fulfill, in part, that requirement. A groundwater contour map is used in simple hydrogeologic settings to depict variations in the elevation of the water table surface, which can in turn be interpreted to reflect relative directions of groundwater flow. The groundwater elevation contours depicted in Figure 5 cannot be used to infer groundwater flow directions or rates of groundwater movement for the following reasons:

- Several hydraulically significant features such as fault zones and shale beds are present at SSFL and act as impediments to groundwater flow across them. Accordingly, while significant variations in the elevation of groundwater are present at SSFL, these differences do not necessarily indicate preferred directions of groundwater flow.
- The water level elevations depicted probably do not represent the elevation of the first occurrence of groundwater due to the relatively long open intervals of some of the monitoring wells. The water levels shown represent average heads over the screened or open interval.

- Groundwater flow directions and rates in fractured rock are influenced by the bedrock matrix and possibly the orientation of structural features and stratigraphy.

Static depths to water in Chatsworth Formation wells measured during 2003 ranged from above land surface at artesian wells RD-59B, RD-59C, RD-68A, and RD-68B to 508.78 feet at well RD-47 in the second quarter 2003. Water level elevations measured in Chatsworth Formation monitor wells during November 2003 ranged from approximately 1,314 feet above mean sea level (MSL) at well RD-59A to 1,898 feet above MSL at well RD-42 (Table II). As site characterization studies continue, the rate and direction of groundwater flow in each groundwater unit may be further refined.

2.2 Groundwater Quality Results

The groundwater monitoring program at SSFL fulfills the requirements of multiple regulatory programs prescribed by the Post-Closure Permits (California DTSC, 1995), a Class 2 Permit Modification of the Post-Closure Permits (California DTSC, 2001), the LUFT program overseen by DTSC, and various characterization efforts conducted at SSFL. The Post-Closure Permit monitoring programs include the Evaluation Monitoring Program and Detection Monitoring Program. The Evaluation Monitoring Program requires semi-annual sampling of point of compliance wells, evaluation monitoring wells, and interim corrective action wells. Detection monitoring wells, including background wells, are sampled quarterly.

Per the groundwater monitoring program, groundwater samples were collected during 2003 from shallow and Chatsworth Formation wells, and selected off-site wells and springs. With the concurrence of DTSC, sample collection at several wells was postponed during 2003 to accommodate a pumping test at corehole C-1 (DTSC, 2003). A summary of the specific analyses conducted at individual wells and springs during 2003 is presented in Table B-II of Appendix B. This section summarizes the results of the routine quarterly groundwater monitoring program for 2003.

Groundwater sample results from Facility wells are compared to various regulatory limits for discussion purposes. For those compounds or water quality constituents that have Maximum Contaminant Levels (MCLs) promulgated per the Safe Drinking Water Act (SDWA), the MCLs are used for purposes of comparison. Some constituents of concern do not have associated MCLs, but have California State Action Levels (ALs) that are used for purposes of comparison and discussion. Action levels are health-based advisory levels for chemicals in drinking water that are established for those chemicals for which there are no formal regulatory standards. Water purveyors are required to advise their customers of the presence of these compounds in drinking water when concentrations are at or above action levels. If concentrations of these compounds exceed 10 or 100 times the action levels, water purveyors are required to remove the water source from their distribution system (DHS, 2003). In all cases, it is important to note that the groundwater beneath the SSFL Facility is not used to supply drinking water. All references to MCLs and ALs are for purposes of discussion only. In addition, reporting requirements in the Post-Closure Permits call for posting of all water

quality results above method detection limits. These data are flagged to indicate the uncertainty associated with data reported at concentrations below the reporting limit.

Water quality results are tabulated in Tables III through XIII and XVII. Analytical results for cis-1,2-dichloroethene (cis-1,2-DCE) and trichloroethene (TCE), the most prevalent contaminants detected in groundwater samples collected from the site, are posted on a site base map in Figures 6 through 9 for the near-surface and Chatsworth Formation groundwater systems. Maximum concentrations of constituents of concern detected during 2003 are posted on Figures 10 through 19. Constituents of concern that were not detected in any groundwater samples during 2003 are not posted on the figures. Figure 20 presents wells sampled for Appendix IX constituents during 2003. Concentrations of Appendix IX constituents detected during 2003 are posted on Figures 21 and 22. Concentration versus time plots for constituents of concern at permitted wells are presented in Appendix F.

During the 2003 routine quarterly sampling, laboratory analyses were performed for the determination of volatile organic compounds (VOCs), fuel hydrocarbons, trace metals, cyanide, inorganic constituents, semi-volatile organic compounds, perchlorate, gross alpha and beta, tritium, and gamma-emitting radionuclides. As part of the Chatsworth Formation Operable Unit (CFOU) groundwater investigation, a number of wells were monitored quarterly for constituents of concern (Table XII). A quality assurance summary of the monitoring program is presented in Appendix D.

As required by the existing Post-Closure Permits, seven point of compliance wells were monitored for the full list of Appendix IX constituents during the year per the 2003 schedule (Table B-I of Appendix B). Results of the 2003 Appendix IX analyses were subjected to a data validation process in accordance with guidance from the United States Environmental Protection Agency (USEPA) "National Functional Guidelines for Organic Data Review" (EPA540/R-99/008, October 1999), "National Functional Guidelines for Inorganic Data Review" (EPA540/R-01/008, July 2002), and the EPA Method specific protocol criteria, where applicable. A summary of the data validation process is included in Appendix H.

2.2.1 Near-Surface Groundwater

Groundwater samples were collected from 38 shallow wells as part of the groundwater monitoring program in 2003. In addition, one near-surface groundwater piezometer was sampled during the year. All analytical results were within historic ranges (GWRC, 2000; Haley & Aldrich, Inc., 2001, 2002a, 2002b, 2003a), with the exceptions noted below. Results for each well are summarized in Tables III through XII. Deviations from historic water quality results for analytes exceeding the practical quantitation limits (PQLs) and results of verification sampling are discussed below.

As part of the Near-Surface Groundwater Characterization, 132 piezometers were installed during 2000 through 2003. Groundwater samples were collected from the piezometers for the analysis of various compounds of concern. Results of these samples were summarized in the Near-Surface Groundwater Characterization Report (MWH, 2003c).

2.2.1.1 LUFT Program

Semi-annual sampling of shallow LUFT program wells was conducted during the first half of 2003. During the third and fourth quarters of 2003, semi-annual sampling was postponed to accommodate the C-1 corehole pumping test. All volatile organic and fuel hydrocarbon analytical results for groundwater samples collected during 2003 were within historic ranges (Tables III and V).

2.2.1.2 Evaluation Monitoring Program/Interim Corrective Action Program

Sampling of shallow evaluation monitoring wells and interim corrective action wells was conducted during the first and third quarters of 2003. The sampling of five interim corrective action wells and two evaluation monitoring wells was postponed, with DTSC concurrence, to accommodate the C-1 corehole pumping test (DTSC, 2003). Results for each well are summarized in Table III. Except for the acetone detected in evaluation monitoring well HAR-03 groundwater, all analytical results were within historic ranges, suggesting stable plumes. Reported at 25 micrograms per liter (ug/l) during the first quarter, acetone had not been detected in previous samples collected from HAR-03. Sampling of HAR-03 during the second half of the year was postponed to accommodate the C-1 corehole pumping test.

2.2.1.3 Point of Compliance Program

During the second quarter 2003, shallow wells SH-04, RS-08, HAR-14, and HAR-15 were sampled for the full suite of Appendix IX constituents (Table XI). All analytical results for Appendix IX samples are discussed in Section 2.2.3 below.

2.2.1.4 Near-Surface Groundwater Radiochemistry Analyses

During 2003, near-surface groundwater samples were collected from select shallow wells for the analysis of gross alpha and gross beta, tritium, gamma-emitting radionuclides, isotopic thorium, and isotopic uranium using EPA Methods 900.0, 906.0, 901.1, 907.0, and 908.0, respectively (Tables IX and X). Beginning in the third quarter 2003, samples were collected for the analysis of additional radionuclides per EPA's drinking water regulations (Federal Register, 2000):

- If gross alpha activity exceeded 5 picoCuries per liter (pCi/l), Ra-226 and Ra-228 were analyzed by EPA Methods 903.1 and 904.0, respectively;
- If gross alpha activity exceeded 15 pCi/l, uranium isotopes were analyzed by EPA Method 908.0; and
- If gross beta activity exceeded 50 pCi/l, K-40 and Sr-90 were analyzed by EPA Methods 901.1 and 905.0, respectively.

Results of radiological analyses of near-surface groundwater samples collected during 2003 were consistent with historic data (Appendix E). None of the gross alpha, gross beta, or tritium results exceeded the drinking water Maximum Contaminant Levels (MCLs) of 15 pCi/l, 50 pCi/l, or 20,000 pCi/l, respectively, except for the second quarter RS-18 gross alpha concentration of 29.1 ± 9.1 pCi/l (Table IX). The second quarter RS-18 sample contained uranium isotopes at the following activities: uranium-233/234 at 20.3 ± 1.2 pCi/l, uranium-235 at 1.05 ± 0.12 pCi/l, and uranium-238 at 19.3 ± 1.1 pCi/l (Table X). Results of historic and 2003 isotopic uranium analyses of RS-18 groundwater confirmed that naturally-occurring uranium isotopes are present in groundwater samples collected from RS-18 (Table X, Appendix E).

Groundwater samples are routinely collected from select wells for analysis of gamma ray spectroscopy to document the occurrence of natural gamma emitters in groundwater, and to monitor for potential anthropogenic gamma activity. Project specific technical specifications, including Minimum Detectable Activities (MDAs) have been developed to insure collection of high quality data, and to be consistent with recent EPA Drinking Water regulations (40 CFR Parts 9, 141, and 142). Review of the gamma spectroscopy data indicates that some data do not meet the MDA requirements. Non-attainment of the MDA technical specifications are due, in part, to matrix conditions and, in part, to limitations in the prescribed analytical methods. Matrix conditions, including dissolved and suspended solids, impact the homogeneity of the samples and limit method counting efficiency. Additionally, prescribed analytical methods call for specified sample volumes and counting times that further limit the ability to attain the project MDAs. Potential corrective measures, including increasing counting volumes from 0.5 liters (L) to 1.5 L, and increasing counting times, are being evaluated to attain project MDAs. None of the gamma spectroscopy data exceeded recent EPA Drinking Water MCLs, or indicated the presence of anthropogenic gamma emitters (Table X). Groundwater sample results from the Facility wells are compared to drinking water MCLs for discussion purposes only. The groundwater beneath the SSFL Facility is not used for drinking water purposes.

The radiochemistry laboratory was able to meet the contract-required minimum detectable activity (MDA) for most radiochemical analyses. The contract-required MDAs are equal to or less than detection limits prescribed by CCR Title 17, Sections 64441 through 64447 for drinking water. For a number of samples, the contract-required MDAs could not be met for the following reasons:

- Some of the gross alpha and gross beta MDAs were greater than the required MDA. In each case, the positive result determined for the radioisotope exceeded both the required and obtained MDAs.

- Some gamma-emitting radioisotopes (eg., Pb-210, Ra-226, and Th-230) exceeded contract-required MDAs even after count times in excess of 5200 minutes.

2.2.1.5 Other Monitoring

Perchlorate was not detected in samples collected from piezometer PZ-012 (Table VIII). PZ-012 water was sampled in December 2003. PZ-012 is not part of the 2003 monitoring program.

All other monitoring of near-surface groundwater water quality during 2003 yielded results consistent with historical data with the exceptions noted below.

- In a sample collected on February 25th from well RS-25, perchlorate was reported below the PQL at an estimated concentration of 2.1 ug/l (Table VIII). Because this well was dry or contained insufficient water for sampling during previous quarters, perchlorate samples had not been collected previously from well RS-25. On March 28, 2003, MWH collected primary, duplicate, and split perchlorate samples from RS-25. Perchlorate was only detected in the split sample at a concentration of 1.546 ug/l. Duplicate and split perchlorate samples collected during the second quarter from well RS-25 did not contain perchlorate above the method detection limit.
- In a sample collected from well RS-19 during the second quarter, perchlorate was reported below the PQL at an estimated concentration of 2.3 ug/l (Table VIII). Perchlorate had not been detected in samples previously collected from this well. RS-19 was dry when monitored in subsequent quarters. Duplicate and split perchlorate samples will be collected from RS-19 during the first quarter 2004 if sufficient water is present in the well for sampling.

The Boeing Company has committed significant resources to resolving the issue of false-positive detection of perchlorate using EPA Method 314.0. Future verification procedures for perchlorate will include enhanced verification procedures including spiking of samples and reanalysis of samples using LC/MS/MS methods. These verification procedures are presented in the QAPP for the Perchlorate Characterization Work Plan (MWH, 2003d).

2.2.2 Chatsworth Formation

Chatsworth Formation groundwater samples were collected from 119 Facility wells and 13 private off-site wells and springs as part of the groundwater monitoring program in 2003. Detection monitoring wells and background wells were sampled quarterly. For the Evaluation Monitoring Program, Chatsworth Formation evaluation monitoring wells and interim corrective action wells were sampled during the first and third quarters of 2003. Three Chatsworth Formation wells serving as point of

compliance wells were sampled for Appendix IX parameters in 2003. As part of the northeast Area I and Area II CFOU groundwater investigation, selected Chatsworth Formation wells were sampled quarterly for constituents of concern. Select seeps and springs were also sampled as part of the groundwater monitoring program.

Analytical results of Chatsworth Formation groundwater samples collected during 2003 are summarized in Tables IV through XIII. Overall, results were consistent with historic results (GWRC, 2000; Haley & Aldrich, Inc., 2001, 2002a, 2002b, 2003a, 2003b). Deviations from historic water quality results for analytes reported above the PQLs are discussed below.

Note: During the year, several samples were collected from multi-level FLUTes installed in Chatsworth Formation wells. Many of the discrete interval samples collected at the wells contained VOCs that were not consistent with groundwater samples collected from these wells according to standard procedures described in the Sampling and Analysis Plan. Benzene and related compounds present in samples collected from FLUTE ports are likely contaminants from FLUTE system components. These low level concentrations of toluene and benzene have been observed by investigators using FLUTE systems at other sites and are attributed to equipment components (Keller, personal communication, 2003).

2.2.2.1 LUFT Program

Semi-annual sampling of Chatsworth Formation wells monitored under the LUFT program occurred during the first quarter 2003. During the third and fourth quarters of 2003, semi-annual sampling was postponed to accommodate the C-1 corehole pumping test. Volatile organic and fuel hydrocarbon samples were collected from all LUFT Program wells that contained sufficient groundwater for sampling. All volatile organic and fuel hydrocarbon analytical results were within historic ranges (Tables IV and V), with the following exceptions:

- Acetone was detected in the split sample collected from well RD-37 during the first quarter 2003. The result is discussed in Section 2.2.2.2 below.

2.2.2.2 Detection Monitoring Program

Chatsworth Formation detection monitoring and background wells were sampled quarterly during 2003 (Tables IV through XII). Sampling at a number of detection monitoring wells during the third and fourth quarters was postponed to accommodate the C-1 corehole pumping test. No VOCs were reported above the PQLs in water samples collected from detection monitoring and background wells with the following exceptions:

- Toluene was detected at concentrations of 1.77 ug/l and 1.3 ug/l in the primary and split samples collected from background well RD-13 during the fourth quarter 2003 (Table IV).
- TCE concentrations in samples collected from background well RD-13 ranged from 1.4 ug/l in the first quarter 2003 to not detected above the method detection limit of 0.26 ug/l in the second quarter (Table IV). During the fourth quarter of 2000, TCE had been reported at 400 ug/l and was attributed to field contamination from a temporary pump that was not properly decontaminated prior to installation at RD-13 (Haley & Aldrich, 2002a).
- The first quarter split sample collected from well RD-37 contained 28 ug/l of acetone (Table IV). This compound was not detected above the PQL in either the first quarter primary and duplicate samples or in the second quarter sample. Third and fourth quarter sampling at RD-37 was postponed to accommodate the C-1 corehole pumping test.
- Acetone was reported above the PQL in the second quarter sample collected from background well RD-48B at a concentration of 11 ug/l (Table IV). Acetone was not detected above the PQL in any other samples collected from RD-48B during 2003.
- The third quarter sample collected from detection monitoring well RD-61 contained benzene at a concentration of 0.68 ug/l (Table IV). This contaminant was not detected above the PQL in verification samples collected during the fourth quarter 2003.

Prior to FLUTe installation, a groundwater sample collected from detection monitoring well RD-39A in April 2001 contained TCE at a concentration of 0.5 ug/l. Verification sampling has been scheduled at well RD-39A since that time, but the well has not contained sufficient water for sampling. During the third and fourth quarters 2003, monitoring at RD-39A was postponed to accommodate the C-1 corehole pumping test.

Per the Post-Closure Permits, verification sampling will be conducted at wells RD-13 during the first quarter 2004 and at RD-39A following the completion of the C-1 pumping test to determine if VOCs are present in groundwater at these detection monitoring wells.

2.2.2.3 Evaluation Monitoring Program/Interim Corrective Action Program

Sampling of Chatsworth Formation evaluation monitoring wells and interim corrective action wells was conducted during the first and third quarters of 2003. Results for each well are summarized in Tables IV through XII. All analytical results were within historic ranges (GWRC, 2000; Haley &

Aldrich, Inc., 2001, 2002a, 2002b, 2003a, 2003b) with the following exceptions:

- Concentrations of acetone, cis-1,2-dichloroethene (cis-1,2-DCE), trichloroethene (TCE), and vinyl chloride in groundwater samples collected from evaluation monitoring well RD-55A during 2003 decreased from the high concentrations observed in the fourth quarter 2002 samples.
- During the first quarter 2003, acetone was reported in groundwater collected at evaluation monitoring well RD-55B at a concentration of 13 ug/l (Table IV). Acetone was detected once before in RD-55B groundwater in February 1996 at a concentration of 11 ug/l. Acetone was not detected in samples collected from RD-55B during the second or third quarters.
- Acetone was reported at a concentration of 12 ug/l in the first quarter 2003 groundwater sample collected from interim corrective action well RD-09 (Table IV). Acetone was last reported in this well in 1986 at a concentration of 95 ug/l. Samples could not be collected during subsequent monitoring events due to CFOU investigation activities.
- Groundwater collected from interim corrective action well WS-09A contained 39 ug/l of acetone during the first quarter 2003 (Table IV). Acetone was detected only once before in WS-09A groundwater in 1995 but was identified as a laboratory contaminant. Acetone was not detected in second, third, and fourth quarter 2003 samples collected from WS-09A.
- During 2003, cis-1,2-DCE and TCE increased in samples collected from interim corrective action well WS-09A (Table IV). Maximum cis-1,2-DCE and TCE concentrations of 1,100 ug/l and 2,000 ug/l, respectively, exceeded previous maximums of 240 ug/l cis-1,2-DCE and 1400 ug/l TCE in August 1993.
- During 2003, perchlorate was detected in groundwater collected from well RD-10 (Table VIII). During the first and second quarters, composite samples were collected from RD-10 FLUTe ports 3, 6, and 9 located at depth intervals of approximately 211 to 221 feet, 271 to 281 feet, and 331 to 341 feet, respectively. The composite sample concentrations ranged up to 220 ug/l. These perchlorate results are consistent with composite RD-10 FLUTe samples analyzed during 2002 (Haley & Aldrich, 2003a). The California drinking water action level for perchlorate is 4 ug/l.

2.2.2.4 Constituents of Concern Analyses

Per the Post-Closure Permits, Chatsworth Formation detection monitoring wells and background wells were originally sampled and analyzed for all constituents of concern in 1996. Background wells were sampled and analyzed again for constituents of concern in 1999. During 2000, all detection monitoring wells, background wells, and evaluation monitoring wells were sampled for constituents of concern (Haley & Aldrich, Inc., 2001a). As part of the on-going Chatsworth Formation Operable Unit (CFOU) Investigation, quarterly sampling for constituents of concern was conducted during 2003 at five Area I wells (RD-01, RD-02, RD-10, RD-44, and WS-05) and seven Area II wells (HAR-20, RD-04, RD-49A, RD-49B, RD-49C, WS-06, and WS-09) (Table XII). Well HAR-20 was dry when monitored during the year. During the third and fourth quarters 2003, constituents of concern sampling at wells RD-01, RD-10, and WS-05 was postponed to accommodate the C-1 corehole pumping test. Constituents of concern samples were also collected from former water supply wells WS-12 and WS-13 during the year.

Ammonia was detected in groundwater samples from wells RD-10, RD-49C, WS-05, and WS-06 at concentrations ranging up to 0.13 mg/l in a sample collected from well RD-10. Fluoride concentrations in groundwater collected from the 13 sampled wells were below the federal drinking water primary MCL of 2.0 mg/l. In samples in which nitrate was reported above the method detection limit (MDL), the concentrations were below the federal drinking water primary MCL of 10 mg/l for nitrate-nitrite as nitrogen. Where detected, formaldehyde did not exceed the California drinking water action level of 100 ug/l (Table XII).

NDMA was reported above the PQL in groundwater samples from wells RD-02, RD-04, RD-49A, RD-49B, RD-49C, and WS-09. NDMA had been detected previously in each of these wells. Three wells contained NDMA in concentrations exceeding the California drinking water action level of 0.01 ug/l: RD-04, RD-49B, and RD-49C. Maximum NDMA concentrations reported in groundwater from these wells were 0.038 ug/l in RD-04, 0.066 ug/l in RD-49B, and 0.014 ug/l in RD-49C.

VOC concentrations were within historic ranges with the following exceptions:

- Trichlorotrifluoroethane (Freon 113) was reported for the first time in groundwater collected from well RD-49C during the first quarter at a concentration of 5 ug/l. Subsequent samples collected from this well during 2003 did not contain trichlorotrifluoroethane.
- Increased VOC concentrations observed in samples collected from wells RD-01, RD-02, and WS-09, as summarized below, may be concentration rebound effects that occurred following the inactivation

of these extraction wells during CFOU groundwater investigations. Wells RD-01 and RD-02 were inactivated during 2000, while well WS-09 was inactivated during 2002.

Well	Compound	Maximum Concentration (ug/l)			
		2000	2001	2002	2003
RD-01	Cis-1,2-DCE	150	340	900	690
	TCE	220	610	1,200	970
RD-02	Cis-1,2-DCE	140	700	580	450
	TCE	120	700	470	290
WS-09	Cis-1,2-DCE	4.7	3.6	540	430
	TCE	61	46	7,500	7,600

Water levels in all three wells increased through early November 2003.

- During 2003, 1,4-dioxane was reported at least once in groundwater samples collected from wells RD-01, RD-02, RD-04, RD-10, RD-49A, RD-49B, RD-49C, WS-05, WS-06, and WS-09. 1,4-Dioxane results exceeded the California drinking water action level of 3 ug/l in the second quarter sample collected from well WS-09 at a concentration of 3.71 ug/l. Previous samples collected from WS-09 contained 1,4-dioxane at concentrations ranging up to 2.1 ug/l (Haley & Aldrich, 2003a). Samples were not collected from WS-09 during the third and fourth quarters because the pumping equipment was removed from the well to accommodate the CFOU investigation. WS-09 will next be monitored for 1,4-dioxane during the first quarter 2004.

2.2.2.5 Monitoring of Perimeter Wells and Private Off-Site Wells and Springs

Perimeter wells near the site boundary were sampled quarterly during 2003 (Tables IV through XIII). Private off-site well OS-28 was sampled for the first time during 2003. This domestic supply well replaced well OS-17 which had become inoperational. Analyses performed on the OS-28 samples included VOCs, low-level 1,4-dioxane, semi-volatile organic compounds (SVOCs), low-level NDMA, inorganics, trace metals, and perchlorate (Tables IV, VI, VII, VIII, XII, and XIII). Additional sampling occurred at private off-site wells and springs over the year. Several perimeter and private off-site wells were monitored for perchlorate and inorganic constituents as part of the Perchlorate Characterization Work Plan (MWH, 2003d). Off-site well OS-09 (Bathtub Well No. 1) was sampled weekly during the third and fourth quarters for perchlorate and inorganics and monthly for stable isotopes. Results for OS-09 and wells in the Perchlorate Characterization Work Plan are discussed in Section 2.2.4.

Perchlorate was not detected in perimeter or off-site wells during 2003 monitoring (Table VIII). Analytical results indicated that VOCs were not

detected above the PQLs in groundwater samples collected from perimeter wells and private off-site wells and springs with the following exceptions:

- Discrete depth interval samples were collected from multi-level FLUTes installed in perimeter wells RD-22, RD-50, and RD-57. Low levels of VOCs (including acetone, benzene, chlorobenzene, and toluene) were reported in several FLUTE samples (Table IV). Many of these compounds were detected in FLUTE samples collected in previous years (Haley & Aldrich, 2002a, 2003a, 2003b). These compounds have not appeared in groundwater samples collected from these wells using standard procedures described in the Sampling and Analysis Plan. These low level concentrations of toluene and benzene have been observed by investigators using FLUTE systems at other sites and are attributed to equipment components (Keller, personal communication, 2003).

Results of trace metals and cyanide samples collected during 2003 from perimeter wells were within historic ranges with the following exceptions (Table VI):

- Arsenic results for samples collected from the FLUTE system installed in perimeter well RD-22, located near the FSDF, were high compared to samples collected prior to FLUTE installation. Collected from FLUTE port 2 at a depth interval of approximately 330 to 430 feet, the second quarter sample contained 35 ug/l of arsenic – less than the first quarter result of 320 ug/l and less than the 50 ug/l drinking water MCL. Prior to 2003, arsenic had been detected at RD-22 once in 2001 at a concentration of 0.69 ug/l in groundwater collected following the standard procedures described in the Sampling and Analysis Plan.

Although manganese results for samples collected from the FLUTE system installed in perimeter well RD-57 exceeded the secondary MCL, the results were comparable to historic groundwater samples. The manganese result for the sample collected from private off-site well OS-28 also exceeded the secondary MCL of 50 ug/l. Manganese is a naturally occurring metal that is commonly present in groundwater in excess of the secondary MCL.

Inorganic results (Table XIII) from wells not included in the Perchlorate Characterization Work Plan did not exceed drinking water MCLs with the following exceptions:

- Total dissolved solids (TDS) results from OS-28 samples exceeded the secondary MCL of 500 ug/l, ranging from 770 to 790 ug/l.

- Specific conductance measurements equaled or exceeded the 900 micromhos per centimeter (umhos/cm) secondary MCL in both OS-28 samples (1,200 umho/cm each).

SVOCs were not detected in 2003 samples collected from well OS-28 (Table VII) except for a low concentration of bis(2-ethylhexyl) phthalate which was attributed to laboratory contamination.

NDMA samples were collected from well OS-28 in August, September, and December 2003 (Table XII). Although Del Mar reported a concentration of 0.012 ug/l in the August primary sample, the result was rejected because instrument calibration procedures did not meet the criterion established by the method for the analysis of samples. Del Mar Analytical did not detect NDMA in the duplicate August sample. Weck Laboratories analyzed the same sample extracts and determined that NDMA was detected in one of the two August samples at an estimated value of 0.0019 ug/l. This sample was originally reported as a non-detect at the reporting limit of 0.002 ug/l.

NDMA samples collected from OS-28 in September 2003 were analyzed by Weck Laboratories. Of the three September samples analyzed, NDMA was identified in one sample at 0.006 ug/l, but the result was biased high due to low recovery of the internal standard. This result was flagged as estimated in this report. In the second September sample, the reported result was rejected due a laboratory spike deficiency. The third September sample result was flagged as non-detected because the reported sample concentration was less than five times the NDMA concentration reported in the method blank.

OS-28 samples collected during December 2003 were analyzed for NDMA by Weck Laboratories and Pacific Analytical. Pacific Analytical reported NDMA at 0.002 ug/l and 0.0036 ug/l in the primary and duplicate samples, respectively. Weck Laboratories reported a concentration of 0.0047 ug/l in the split sample.

All NDMA results reported for OS-28 samples were below the California drinking water action level of 0.01 ug/l.

Due to the difficulty of attaining precision and accuracy at the part per trillion level, analytical procedures for modified method 1625 are under review and additional sampling is planned once an augmented QA/QC plan is in place.

2.2.2.6 Point of Compliance Program

During 2003, Chatsworth Formation point of compliance wells HAR-07, HAR-16, and HAR-17 were monitored for Appendix IX constituents (Table XI). Insufficient water conditions precluded the collection of a full suite of Appendix IX constituents at well HAR-16. Composite samples were prepared for the analysis of VOCs, 1,4-dioxane, and semi-volatile organic samples

collected from discrete depth interval ports 7 through 12 of the FLUTE installed in well HAR-16. All analytical results for Appendix IX samples are discussed in Section 2.2.3 below.

2.2.2.7 Chatsworth Formation Radiochemistry Analyses

During 2003, Chatsworth Formation groundwater samples were collected from select wells for the analysis of gross alpha and gross beta, tritium, gamma-emitting radionuclides, isotopic thorium, and isotopic uranium using EPA Methods 900.0, 906.0, 901.1, 907.0, and 908.0, respectively (Tables IX and X). Beginning in the third quarter 2003, samples were collected for the analysis of additional radionuclides per EPA's drinking water regulations:

- If gross alpha activity exceeded 5 picoCuries per liter (pCi/l), Ra-226 and Ra-228 were analyzed by EPA Methods 903.1 and 904.0, respectively;
- If gross alpha activity exceeded 15 pCi/l, uranium isotopes were analyzed by EPA Method 908.0; and
- If gross beta activity exceeded 50 pCi/l, K-40 and Sr-90 were analyzed by EPA Methods 901.1 and 905.0, respectively.

Results of radiological analyses of Chatsworth Formation groundwater samples collected during 2003 were generally consistent with historic data (Appendix E), with the following exceptions and notation.

Groundwater samples from two wells (RD-29 and RD-34A) exceeded the gross alpha drinking water MCL of 15 pCi/l (Table IX). The sum of radium-226 and radium-228 activities for samples from wells RD-07, RD-24, RD-25, RD-28, and RD-30 was below the drinking water MCL of 5 pCi/l for Ra-226/228 combined (Table IX). Review of historic gross alpha results indicate that gross alpha activity from wells RD-29 and RD-34A periodically exceed the MCL. Results of historic isotopic uranium analyses for wells RD-29 and RD-34A and isotopic uranium analyses conducted in 2003 (Table X) confirm that naturally-occurring uranium and thorium isotopes are present in groundwater samples collected from these and other wells located at the SSFL Facility. The results of specific radioisotopes indicate that the slightly elevated concentrations of gross alpha activity observed in groundwater samples can be attributed primarily to components of the naturally occurring uranium-238 decay series.

None of the gross beta results exceeded the drinking water MCL of 50 pCi/l. None of the tritium results exceeded the drinking water MCL of 20,000 pCi/l (Table IX) and all values were consistent with historical results (Appendix E). Results of 2003 isotopic analyses indicate that naturally-occurring uranium isotopes are present in groundwater samples collected from the SSFL Facility (Table X).

Split samples were collected from wells RD-24, RD-27, RD-33C, and RD-59A for the analysis of gross alpha, gross beta, radium isotopes, tritium, and gamma-emitting radionuclides. Split sample results analyzed by Severn Trent Laboratories of Richland, Washington were consistent with results analyzed by primary laboratory Eberline Services of Richmond, California (Tables IX and X).

The radiochemistry laboratory was able to meet the contract-required minimum detectable activity (MDA) for most radiochemicals. The contract-required MDAs are equal to or less than detection limits prescribed by CCR Title 22 for drinking water. See Section 2.2.1.4 for a detailed discussion of MDAs and MCLs. For a number of samples, the contract-required MDAs could not be met for the following reasons:

- Some of the gross alpha, gross beta, and isotopic uranium MDAs were greater than the required MDA. In all cases, the positive result determined for the radioisotope exceeded both the required and obtained MDAs.
- Some gamma-emitting radioisotopes exceeded contract-required MDAs even after count times in excess of 4200 minutes.
- Interference from the Th-229 analytical tracer prevented the laboratory from reaching the required MDA for Th-230 in first quarter samples from wells RD-07, RS-28, and RD-54A.
- Isotopic thorium MDAs exceeded contract-required MDAs in the second quarter sample collected from well RD-34A.

2.2.2.8 Monitoring of Other Facility Wells

Several Facility wells that are not monitored as part of the LUFT program; the interim corrective action, evaluation monitoring, detection monitoring or point of compliance programs; or that are not perimeter wells, were sampled during 2003 (Tables IV through XI). Semi-annual groundwater samples were collected during 2003 from FSDF-area, Radioactive Materials Handling Facility (RMHF)-area wells, Building 59-area wells, and other Facility wells. VOC, trace metal, perchlorate, and radiochemical results for these samples were within historic ranges (GWRC, 2000; Haley & Aldrich, 2001, 2002a, 2002b, 2003a, 2003b) with the following exceptions:

- Discrete depth interval samples were collected from multi-level FLUTes installed in wells RD-07, RD-21, RD-23, RD-31, RD-33A, RD-54A, RD-64, and RD-65 (Table IV). Low levels of VOCs (including benzene and toluene) were reported in the FLUTE samples. Many of these compounds were detected in FLUTE samples collected previously (Haley & Aldrich, 2002a, 2003a, 2003b). These compounds have not appeared in groundwater samples collected from these wells using standard procedures described in the Sampling and Analysis Plan. These low level concentrations of toluene and benzene

have been observed by investigators using FLUTe systems at other sites and are attributed to equipment components (Keller, personal communication, 2003).

- In the third and fourth quarter samples collected from port 2 of the FLUTe installed in FSDF-area well RD-21, cis-1,2-DCE was reported at a maximum concentration of 190 ug/l (Table IV). In samples collected prior to FLUTe installation, the maximum cis-1,2-DCE concentration reported was 21 ug/l in a 1990 sample. The 2003 RD-21 samples were collected from FLUTe port 2 at a depth interval of approximately 105 to 115 feet. The RD-21 FLUTe will next be sampled following completion of the corehole C-8 pumping test.
- Chloroethane and 1,2-dichloroethane were reported at concentrations of 1.2 ug/l and 0.57 ug/l, respectively, in the first quarter groundwater sample from well RD-54B (Table IV). These compounds were not detected previously in RD-54B groundwater, and were not detected in subsequent samples collected during 2003.
- TCE was reported at an estimated concentration of 0.5 ug/l in the third quarter sample collected from well RD-54C (Table IV). This result appeared to be a carry-over contaminant introduced from the third quarter RD-23 sample analyzed immediately prior to RD-54C.
- During 2003, arsenic was detected for the first time in RD-23 groundwater at a maximum concentration of 25 ug/l and increased in RD-54A groundwater from the previous maximum concentration of 3.1 ug/l to a maximum concentration of 43 ug/l (Table VI). The RD-23 samples were collected from FLUTe port 1 at a depth interval of approximately 231 to 241 feet. The RD-54A samples were collected from FLUTe port 2 at a depth interval of approximately 170.5 to 180.5 feet. All results are below the federal primary drinking water MCL of 50 ug/l.
- 2003 samples collected from well RD-15, RMHF-area well RD-34A, and FSDF-area wells RD-23, RD-54A, RD-54B, and RD-54C contained iron and/or manganese at concentrations exceeding secondary drinking water MCLs (Table VI). For each of the FSDF-area wells, the reported concentrations were within historical ranges for groundwater at these wells. Iron concentrations in 2003 samples from wells RD-15 and RD-34A were one order of magnitude larger than previous samples. Iron and manganese are naturally occurring metals that are commonly present in groundwater in excess of the 300 ug/l and 50 ug/l secondary drinking water MCLs, respectively.

Extensive sampling for perchlorate in groundwater has been conducted since 1997. Extensive activities related to characterization of perchlorate in soil and water at SSFL were conducted at SSFL in 2003. Characterization and

remediation activities were conducted in Happy Valley in Area I, and investigation of potential off-site migration of perchlorate was conducted in drainages north and east of the facility (MWH, 2003a, 2003b, 2003d).

Only the results of perchlorate sampling conducted as part of the quarterly groundwater monitoring program, and results of the on-going sampling of well OS-09, are reported herein. Findings related to the comprehensive perchlorate source area investigation are reported in the reference cited above. Sampling of well OS-09 is discussed in Section 2.2.4.

Perchlorate samples were collected from several Chatsworth Formation wells during 2003 (Table VIII). Perchlorate was not detected in samples collected from private off-site wells. Samples from four Facility wells contained perchlorate at concentrations ranging from 3.7 ug/l to 220 ug/l. The California action level for perchlorate is 4 ug/l. The 2003 perchlorate results were consistent with historical results, with the following exception:

- Perchlorate was detected below the PQL in discrete depth interval samples collected from the multi-level FLUTe installed in well RD-31 (Table VIII). Estimated perchlorate concentrations were 3.7 ug/l in the sample collected from port 5 at an approximate depth interval of 128 to 138 feet, not detected above the 0.8 ug/l MDL in the sample collected from port 6 at an approximate depth interval of 148 to 158 feet, and 3.8 ug/l in the sample collected from port 7 at an approximate depth interval of 168 to 178 feet. Perchlorate has not been detected in previous groundwater samples collected from RD-31 using standard procedures described in the Sampling and Analysis Plan. RD-31 will next be sampled for perchlorate in the second quarter 2004.

2.2.3 Appendix IX Sampling

During 2003, the seven point of compliance wells (shallow wells SH-04, RS-08, HAR-14, and HAR-15; and Chatsworth Formation wells HAR-07, HAR-16, and HAR-17) were sampled for Appendix IX constituents. Insufficient water conditions precluded the collection of a full suite of Appendix IX constituents at well HAR-16.

2.2.3.1 Data Validation

Results of the second quarter 2003 analyses were subjected to a data validation process in accordance with guidance from the United States Environmental Protection Agency (USEPA) "National Functional Guidelines for Organic Data Review" (EPA540/R-99/008, October 1999), "National Functional Guidelines for Inorganic Data Review" (EPA540/R-01/008, July 2002), and the EPA Method specific protocol criteria, where applicable. A summary of the data validation process is included in Appendix H.

2.2.3.2 Analytical Results

Groundwater samples were collected from seven Facility wells as part of the Appendix IX groundwater monitoring program in 2003. Results for each well are summarized in Table XI and on Figures 21 and 22.

All Appendix IX analytical results for point of compliance wells were within historic ranges with the following exceptions:

- Antimony and sulfide were detected at 6.1 ug/l and 0.15 mg/l, respectively, in the sample collected from shallow well HAR-15. Although antimony has been detected in previous samples from HAR-15 in concentrations ranging up to 3.9 ug/l, the 6.1 ug/l result exceeds the primary drinking water MCL of 6 ug/l. Sulfide has not been detected in previous samples collected from HAR-15. An MCL does not exist for sulfide. Under the current groundwater monitoring program, HAR-15 will next be sampled for inorganics during the second quarter 2004.
- Mercury was detected below the PQL, but above the MDL, at an estimated concentration of 0.000069 mg/l in the sample collected from shallow well SH-04. Mercury has not been detected in previous samples collected from this well. The primary drinking water MCL for mercury is 0.002 mg/l. Under the current groundwater monitoring program, SH-04 will next be sampled for mercury during the second quarter 2004.
- 1,4-Dioxane was detected for the first time at concentrations of 29 ug/l and 5.44 ug/l in samples collected from shallow well SH-04 and Chatsworth Formation well HAR-17, respectively. Detected once in 2001, 1,4-dioxane was reported at 43 ug/l in the composite sample collected from the FLUTe system installed in Chatsworth Formation well HAR-16. The California action level for 1,4-dioxane is 3 ug/l. Under the current groundwater monitoring program, these wells will next be sampled for 1,4-dioxane during the second quarter 2004.
- 1,2,3-Trichloropropane was detected between the PQL and MDL at an estimated concentration of 0.0094 ug/l in the sample collected from shallow well SH-04. This analyte had not been detected previously in SH-04 groundwater samples. The California action level for 1,2,3-trichloropropane is 0.005 ug/l. Verification samples to determine if 1,2,3-trichloropropane is present in groundwater at SH-04 were scheduled for subsequent monitoring events in 2003, but the well was dry when monitored. Verification samples will be scheduled for collection during the first quarter 2004.

- NDMA was detected in shallow wells HAR-14, RS-08, and SH-04 and Chatsworth Formation wells HAR-07, HAR-16, and HAR-17 at concentrations ranging from 22 nanograms per liter (ng/l) to 18,000 ng/l. NDMA had been detected previously in groundwater samples collected from each of these wells. The California action level for NDMA is 10 ng/l.

Appendix IX compounds detected above the PQLs in point of compliance wells during the second quarter 2003 were already listed as constituents of concern; no new compounds were detected above the PQLs. 1,2,3-Trichloropropane was detected below the PQL, but above the primary drinking water MCL. Verification samples will be collected during the first quarter 2004 to determine if 1,2,3-trichloropropane is present in SH-04 groundwater. Per the Post-Closure Permits, the point of compliance wells are monitored annually for Appendix IX constituents and will next be sampled during the second quarter 2004.

2.2.4 Perchlorate Characterization Sampling

Weekly sampling of groundwater from well OS-09 was conducted during 2003 beginning July 2. Water samples were submitted each week for the analysis of perchlorate using EPA method 314.0 (Table VIII). Water samples were also submitted weekly for the analysis of general mineral constituents. General mineral constituents included major anions (carbonate, bicarbonate, chloride, and sulfate), major cations (calcium, magnesium, sodium, and potassium), nitrate, electrical conductivity, total dissolved solids, and pH (Table XIII). Water samples collected on July 2, July 17, August 28, September 25, November 6, and December 4 were submitted for analysis of the stable isotopes deuterium and oxygen-18 (Table XII).

OS-09 groundwater samples collected for perchlorate and for the general mineral constituents were submitted to Del Mar Analytical. Water samples for analysis of perchlorate were also submitted to Ceimic Corporation, and on July 31, to American Analytics. Samples collected for deuterium and oxygen-18 were submitted to the University of Ottawa, G.G. Hatch Isotope Laboratories.

Beginning in the fourth quarter 2003, perchlorate and inorganic samples were collected from select wells as described in the Perchlorate Characterization Work Plan (MWH, 2003c). Wells scheduled and sampled for perchlorate characterization during the fourth quarter 2003 are listed below.

Perchlorate Characterization Sampling, Fourth Quarter 2003	
Wells Sampled	RD-51B, RD-51C, RD-52B, RD-52C, RD-59A, RD-59B, RD-59C, RD-68A, RD-68B, WS-04A, WS-09B, OS-02, OS-03, OS-04, OS-05, spring OS-08, OS-09, OS-10, OS-21, OS-26
Wells Not Sampled due to C-1 Corehole Pumping Test	RD-32, RD-36A, RD-36B, RD-36C, RD-36D, RD-37, RD-38A, RD-38B, RD-39A, RD-39B, RD-43A, RD-43B, RD-43C, RD-45A, RD-45B, RD-45C, RD-66, RD-71, spring OS-13, OS-15, OS-16, OS-24, OS-27
Wells Not Sampled due to Lack of Groundwater	RD-51A, RD-52A, OS-25
Wells Not Sampled for Other Reasons	RD-70 (pump removed for CFOU investigation) Spring OS-12 (sample point not accessible) OS-17 (inoperable)

Inorganic results (Table XIII) did not exceed drinking water MCLs with following exceptions:

- The pH of the RD-68A sample and several OS-09 samples slightly exceeded the upper secondary MCL of 8.5. The RD-68A sample had a pH of 8.72. The maximum pH measured in OS-09 samples was 8.7.
- Total dissolved solids (TDS) results from all samples exceeded the secondary MCL of 500 ug/l except in samples collected from wells RD-59B, RD-68A, RD-68B, and OS-10. TDS values ranged from 410 to 810 ug/l.
- Specific conductance measurements equaled or exceeded the 900 micromhos per centimeter (umhos/cm) secondary MCL in two of the twenty-three OS-09 samples (both at 900 umhos/cm). Samples collected from wells RD-51B, RD-51C, RD-52B, RD-52C, RD-59A, WS-04A, WS-09B, OS-04, OS-05, OS-21, OS-26, and OS-28 and spring OS-08 also exceeded the specific conductance secondary MCL.

Perchlorate was not detected in any of the groundwater samples collected by Boeing from well OS-09 or the other Perchlorate Characterization Work Plan wells (Table VIII). Concentrations of perchlorate have been reported in samples collected by DTSC and Ventura County, but are not reported herein (MWH, 2003d). Results of analyses for the general mineral constituents in groundwater samples collected from well OS-09 indicate the groundwater is sodium-bicarbonate type water (Table XIII). Sodium is the predominant cation in solution and bicarbonate is the predominant anion. Results of analyses for the groundwater samples indicate that the ratio of deuterium to hydrogen expressed as deviation from Vienna Standard Mean Ocean Water (V-SMOW) ranged from -51.0 to -53.8 parts per thousand (per mil) and that the ratio of oxygen-18 to oxygen-16 expressed as deviation from V-SMOW ranged from -7.17 to -7.52 per mil (Table XIII). These data suggest that groundwater collected from OS-09 is not near-surface groundwater or a surface water source.

2.2.5 Results of Fourth Quarter 2003 Verification Sampling

During the fourth quarter 2003, verification samples were collected from detection monitoring wells RD-05B and RD-61, and perimeter well RD-56B. Detection monitoring well RD-39A contained inadequate water for verification sampling during the year; this well will be re-scheduled for the first quarter 2004. Verification samples scheduled from point of compliance well SH-04 for the analysis of 1,2,3-trichloropropane were not collected due to insufficient water volume in the well. Verification procedures include collecting primary and duplicate samples, a split sample, and a field blank at each well. Results for the target wells and analytes are summarized in the following table.

Fourth Quarter 2003 Verification Results						
Well	Constituent(s)	Monitoring Program	Concentration (ug/l)			
			Primary	Duplicate	Split	Field Blank
SH-04	1,2,3-Trichloropropane	Point of Compliance	Dry			
RD-05B	Methylene chloride	Detection	0.48 U	0.48 U	3 U	1.6 J,L
RD-39A	TCE	Detection	Dry			
RD-56B	TCE	Perimeter	0.35 J	0.36 J	0.2 U	0.26 U
RD-61	Benzene	Detection	0.28 U	0.28 U	0.1 U	0.28 U

U = not detected L = laboratory contaminant

J = estimated value; analyte detected between method detection limit and reporting limit

2.2.6 Proposed 2004 Groundwater Monitoring Schedule

Appendix B, Table B-III presents the proposed 2004 groundwater monitoring schedule which complies with monitoring requirements specified in the Post-Closure Permits. The 2003 results indicated that verification sampling be conducted during the first quarter of 2004 to determine if VOCs are present in groundwater at detection monitoring wells RD-13, RD-37, and RD-39A and if 1,2,3-trichloropropane is present in SH-04 groundwater.

The proposed 2004 sampling schedule reflects on-going groundwater monitoring programs as established under the current Facility Post-Closure Permits, Permit Modification, LUFT programs, and voluntary monitoring activities. Boeing is presently working with DTSC on comprehensive review of the Post-Closure Permits. It is anticipated that portions of the Regulated Unit Monitoring Programs, including the Detection Monitoring Program, Evaluation Monitoring Program, Interim Corrective Measures, and Appendix IX, will differ from the schedule presented in Table B-III once permit modifications are implemented.

3. REMEDIAL SYSTEMS

3.1 Remedial Systems Activities

Remedial systems in operation at the Facility during the 2003 calendar year included two permitted air-stripping units located at Delta and STL-IV and one permitted UV/hydrogen peroxide system at the WS-5 area. The Area I Road and Canyon air-stripping units, and the RD-9 UV/hydrogen peroxide system have been placed on "stand-by" status as part of a Post-Closure Permit modification granted by DTSC, in 2001 (DTSC, 2001). The Alfa air-stripping unit was turned off in March 2001 and the Bravo air-stripping unit was turned off in May 2002, as part of the Chatsworth Formation Operable Unit (CFOU) investigation by Montgomery Watson (2000b; Ogden, 2000). The STL-IV air-stripping unit was turned off in March 2003. The WS-5 Area UV/hydrogen peroxide system had been off since late 2000, but was restarted in August 2003 to treat water pumped from the C-1 corehole as part of a long-term pumping test conducted by MWH. DTSC granted temporary authorization to use the WS-5 system to treat C-1 effluent (DTSC, 2003). Pumping at the C-1 corehole ended on 23 January 2004. Data obtained during the pumping test and recovery period will be presented in a report at a later date by MWH (Boeing, 2003).

Of the 20 shallow and 12 Chatsworth Formation extraction wells at the Facility, only two of the Chatsworth Formation wells (WS-09A and HAR-17) were in operation during 2003. All shallow extraction wells were inactive including wells along Area I Road, Area II Road, near APTF, in STL-IV, and at ECL in support of the Near-Surface Groundwater Investigation (Ogden, 2000). The remediation systems and their associated extraction wells are listed in Tables XIV and XV. Monthly and cumulative extraction volume and VOC mass removal at each permitted system are presented in Appendix G, Figures G-1 to G-8.

Additionally, there are three interim extraction/remediation systems located in Area IV at RMHF, FSDF, and B/059. These systems treat pumped groundwater with granular activated carbon prior to discharge. The FSDF system also uses ion exchange resin in series to treat perchlorate-impacted groundwater prior to discharge. There are five Chatsworth Formation wells, one shallow well, one sump, and one excavated pit associated with the interim systems. The interim systems and their associated extraction wells are listed in Table XVI.

All operating remedial systems are monitored monthly by EnviroSolve Corporation, which completes monthly reports listing routine operational data of all systems, including sample analytical data for treatment system influents and effluents. Samples from remedial system influents and effluents are analyzed for VOCs by EPA Methods 8010B and 8260B. Concentrations of TCE and both isomers of 1,2-DCE, the primary VOCs detected from all permitted systems, are summarized for the year 2003 in Table XVII. In addition to these primary VOCs, concentrations of other chlorinated solvents were occasionally detected in treatment system influent streams. Concentrations of 1,1-dichloroethylene and vinyl chloride were detected in the Delta ASU influent during 2003. During 2003, samples from the Delta and STL-IV influents were also analyzed for perchlorate by modified EPA method 300.0, but none was detected (Table XVII).

Surface water discharge is regulated by National Pollution Discharge Elimination System (NPDES) permit No. CA-0001309. Discharge limits and results of water quality analyses of surface water samples collected at Outfalls 001 and 002 are presented in Appendix G, Tables G-I and G-II.

3.1.1 Permitted Systems

Only the Delta and STL-IV remediation systems were in operation during 2003. The Delta system was in operation the entire year, but the STL-IV system was turned off in March to support the Near-Surface Groundwater Investigation (Ogden, 2000). The Bravo remediation system was shut off in May 2002 and did not operate during the reporting period. The WS-5 Area UV/hydrogen peroxide system was shut off in late 2000, but was restarted in August 2003 to treat water pumped from the C-1 corehole as part of a long-term pumping test conducted by MWH. The Alfa system was shut down in March 2001, also to accommodate the CFOU investigation. Total pumpage from all permitted systems in 2003 was approximately 4.639 million gallons. Monthly water levels and flow rates are listed by well in Table XIV. Monthly and cumulative pumpage volumes are listed by well in Table XV. Routine operational data for each permitted system are presented in the monthly reports from EnviroSolve Corporation (2003a through 2004).

TCE was detected in one secondary effluent sample from the Delta system in December, at a reported concentration of 0.58 ug/l, which is below the drinking water MCL. A subsequent sample collected from the Delta system secondary effluent, indicated that TCE was not present above the reporting limit of 0.5 ug/l. Perchlorate was not detected in any of the influent samples at Delta and STL-IV.

3.1.2 Interim Systems

Interim systems in operation at the Facility during 2003 included the RMHF extraction/treatment system and the B/059 construction/dewatering system, which includes the B/056 pit and the S-2 sump. The FSDF system, with RS-54 as the sole extraction well, was shut off in March to facilitate aquifer testing and to support MWH operations. The total pumpage from all interim systems during 2003 was approximately 407,800 gallons. Monthly and cumulative pumpage volumes are listed by well in Table XVI. Routine operational data for each interim system are presented in the monthly reports from EnviroSolve Corporation (2003a through 2004).

No VOCs or perchlorate were detected in effluent samples collected from the interim systems during 2003. Previous samples from well RS-54 had indicated the presence of perchlorate in shallow groundwater near FSDF. Consequently, the interim treatment system in that area includes two carbon drums used to remove VOCs from the water and ion exchange resin drums to remove perchlorate.

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Tables

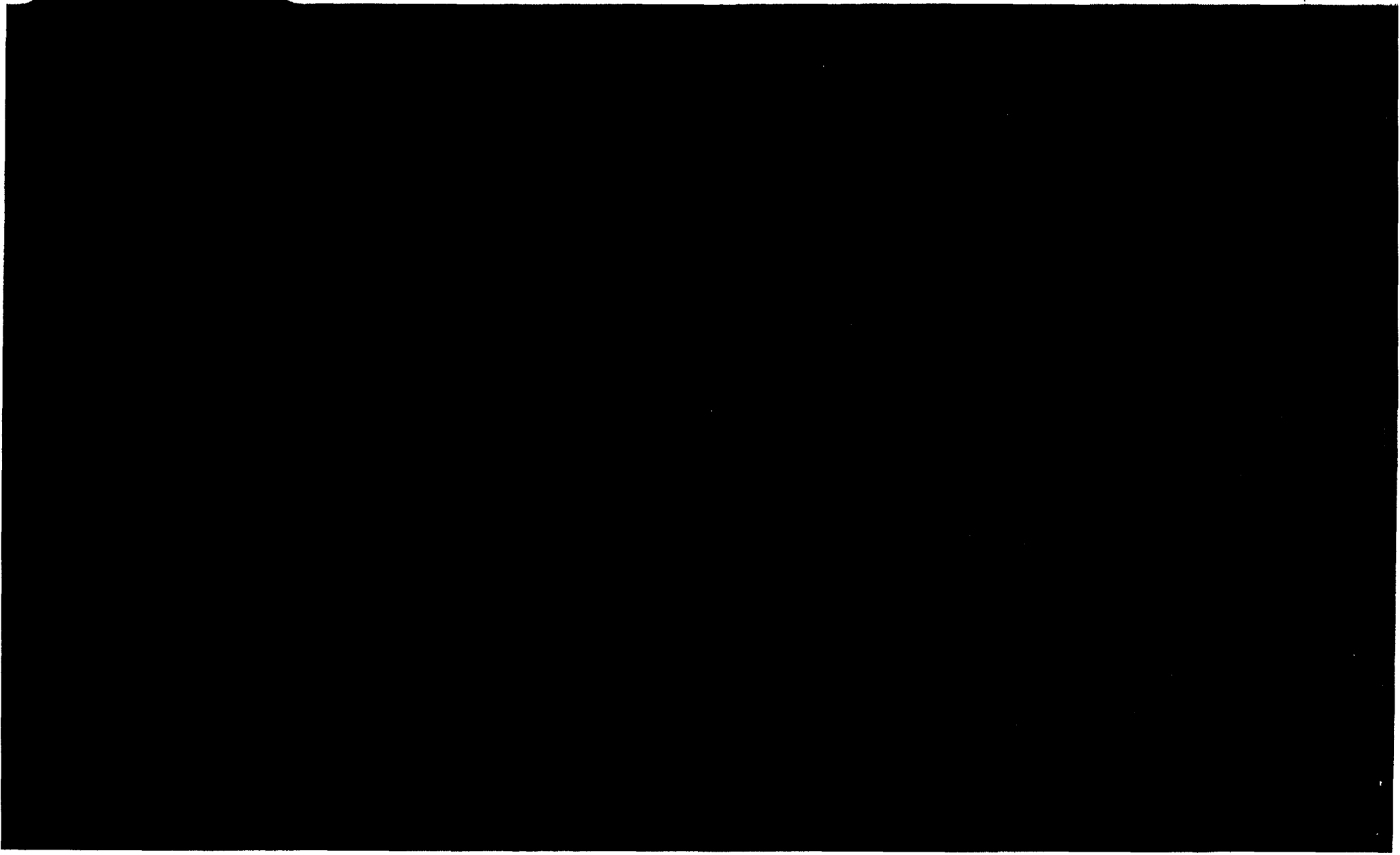


TABLE I
SUMMARY OF ANNUAL RAINFALL
MEASURED AT THE SANTA SUSANA FIELD LABORATORY, 1960-2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Water Year Ending in	Precipitation (inches)	Water Year Ending in	Precipitation (inches)
1960	10.52	1982	12.11
1961	6.18	1983	40.93
1962	24.79	1984	9.50
1963	13.74	1985	9.64
1964	9.96	1986	23.55
1965	16.06	1987	6.27
1966	27.18	1988	17.75
1967	23.99	1989	9.46
1968	19.54	1990	8.38
1969	32.11	1991	15.10
1970	11.81	1992	32.21
1971	16.79	1993	36.23
1972	8.68	1994	12.52
1973	20.69	1995	29.91
1974	16.11	1996	21.81
1975	16.58	1997	15.44
1976	10.99	1998	41.24
1977	13.91	1999	8.84
1978	40.06	2000	12.07
1979	22.96	2001	17.52
1980	28.61	2002	5.70
1981	16.25	2003	25.20
Average Annual Precipitation = 18.05 Inches			

NOTE: Precipitation reported annually for the period of October through September.

TABLE II
SUMMARY OF WATER LEVEL DATA, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
SH-01	01/28/03	1772.84	Dry	---	
SH-01	04/29/03	1772.84	Dry	---	
SH-01	08/06/03	1772.84	Dry	---	
SH-01	11/03/03	1772.84	Dry	---	
SH-02	01/28/03	1762.76	Dry	---	
SH-02	04/29/03	1762.76	6.40	1756.36	
SH-02	08/06/03	1762.76	9.90	1752.86	
SH-02	11/03/03	1762.76	Dry	---	
SH-03	01/28/03	1762.53	Dry	---	
SH-03	04/28/03	1762.53	6.32	1756.21	
SH-03	08/06/03	1762.53	9.60	1752.93	
SH-03	11/03/03	1762.53	Dry	---	
SH-04	01/28/03	1765.08	Dry	---	
SH-04	04/28/03	1765.08	7.33	1757.75	
SH-04	08/06/03	1765.08	Dry	---	
SH-04	11/03/03	1765.08	Dry	---	
SH-05	01/28/03	1762.97	Dry	---	
SH-05	04/29/03	1762.97	9.17	1753.80	
SH-05	08/06/03	1762.97	Dry	---	
SH-05	11/03/03	1762.97	Dry	---	
SH-06	01/28/03	1776.99	Dry	---	
SH-06	04/29/03	1776.99	10.65	1766.34	
SH-06	08/06/03	1776.99	Dry	---	
SH-06	11/03/03	1776.99	Dry	---	
SH-07	01/28/03	1775.11	Dry	---	
SH-07	04/29/03	1775.11	12.48	1762.63	
SH-07	08/06/03	1775.11	Dry	---	
SH-07	11/03/03	1775.11	Dry	---	
SH-08	01/28/03	1763.25	Dry	---	
SH-08	04/29/03	1763.25	7.41	1755.84	
SH-08	08/06/03	1763.25	10.94	1752.31	
SH-08	11/03/03	1763.25	12.00	1751.25	
SH-09	01/28/03	1761.19	Dry	---	
SH-09	04/29/03	1761.19	6.47	1754.72	
SH-09	08/06/03	1761.19	Dry	---	
SH-09	11/03/03	1761.19	Dry	---	
SH-10	01/28/03	1757.69	Dry	---	
SH-10	04/29/03	1757.69	6.63	1751.06	
SH-10	08/06/03	1757.69	Dry	---	
SH-10	11/03/03	1757.69	Dry	---	
SH-11	01/28/03	1756.00	17.06	1738.94	
SH-11	04/29/03	1756.00	8.96	1747.04	
SH-11	08/06/03	1756.00	13.54	1742.46	
SH-11	11/03/03	1756.00	16.28	1739.72	
RS-01	01/27/03	1879.68	Dry	---	
RS-01	04/30/03	1879.68	Dry	---	
RS-01	08/07/03	1879.68	Dry	---	
RS-01	11/03/03	1879.68	Dry	---	

See last page of Table II for footnotes and explanations.

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TABLE II
SUMMARY OF WATER LEVEL DATA, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
RS-02	01/27/03	1901.08	Dry	---	
RS-02	04/29/03	1901.08	Dry	---	
RS-02	08/05/03	1901.08	Dry	---	
RS-02	11/04/03	1901.08	Dry	---	
RS-03	01/28/03	1834.22	Dry	---	
RS-03	04/29/03	1834.22	18.70	1815.52	
RS-03	08/07/03	1834.22	Dry	---	
RS-03	11/04/03	1834.22	Dry	---	
RS-04	01/28/03	1826.56	Dry	---	
RS-04	04/29/03	1826.56	25.39	1801.17	
RS-04	08/06/03	1826.56	30.65	1795.91	
RS-04	11/04/03	1826.56	Dry	---	
RS-05	01/28/03	1783.73	Dry	---	
RS-05	04/29/03	1783.73	Dry	---	
RS-05	08/06/03	1783.73	Dry	---	
RS-05	11/05/03	1783.73	20.08	1763.65	
RS-06	01/28/03	1757.43	Dry	---	
RS-06	04/30/03	1757.43	18.81	1738.62	
RS-06	08/05/03	1757.43	18.22	1739.21	
RS-06	11/06/03	1757.43	18.84	1738.59	
RS-07	01/28/03	1732.27	6.47	1725.80	
RS-07	04/30/03	1732.27	3.69	1728.58	
RS-07	08/05/03	1732.27	4.60	1727.67	
RS-07	11/05/03	1732.27	Dry	---	
RS-08	01/30/03	1821.57	13.29	1808.28	
RS-08	04/29/03	1821.57	8.01	1813.56	
RS-08	08/06/03	1821.57	11.24	1810.33	
RS-08	11/04/03	1821.57	Dry	---	
RS-09	01/28/03	1735.52	Dry	---	
RS-09	04/28/03	1735.52	24.38	1711.14	
RS-09	08/05/03	1735.52	Dry	---	
RS-09	11/03/03	1735.52	Dry	---	
RS-10	01/28/03	1762.08	15.03	1747.05	
RS-10	04/30/03	1762.08	8.78	1753.30	
RS-10	08/05/03	1762.08	Dry	---	
RS-10	11/05/03	1762.08	Dry	---	
RS-11	01/28/03	1790.39	Dry	---	
RS-11	04/28/03	1790.39	17.48	1772.91	
RS-11	08/07/03	1790.39	Dry	---	
RS-11	11/06/03	1790.39	Dry	---	
RS-12	01/28/03	1727.48	Dry	---	
RS-12	04/28/03	1727.48	Dry	---	
RS-12	08/06/03	1727.48	Dry	---	
RS-12	11/03/03	1727.48	Dry	---	
RS-13	01/27/03	1644.20	Dry	---	
RS-13	04/28/03	1644.20	21.55	1622.65	
RS-13	08/05/03	1644.20	Dry	---	
RS-13	11/04/03	1644.20	Dry	---	

See last page of Table II for footnotes and explanations.

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
RS-14	01/28/03	1734.78	Dry	---	
RS-14	04/28/03	1734.78	Dry	---	
RS-14	08/05/03	1734.78	Dry	---	
RS-14	11/03/03	1734.78	Dry	---	
RS-15	01/28/03	1764.86	9.81	1755.05	
RS-15	04/28/03	1764.86	7.49	1757.37	
RS-15	08/05/03	1764.86	9.94	1754.92	
RS-15	11/03/03	1764.86	11.65	1753.21	
RS-16	01/27/03	1811.05	Dry	---	
RS-16	04/28/03	1811.05	Dry	---	
RS-16	08/05/03	1811.05	Dry	---	
RS-16	11/04/03	1811.05	Dry	---	
RS-17	01/28/03	1766.52	13.66	1752.86	
RS-17	04/28/03	1766.52	11.12	1755.40	
RS-17	08/05/03	1766.52	13.94	1752.58	
RS-17	11/04/03	1766.52	NM	---	
RS-18	01/27/03	1802.86	8.64	1794.22	
RS-18	04/28/03	1802.86	5.92	1796.94	
RS-18	08/05/03	1802.86	10.94	1791.92	
RS-18	11/04/03	1802.86	13.99	1788.87	
RS-19	01/28/03	1812.42	Dry	---	
RS-19	04/30/03	1812.42	8.37	1804.05	
RS-19	08/06/03	1812.42	Dry	---	
RS-19	11/04/03	1812.42	Dry	---	
RS-20	01/28/03	1823.77	Dry	---	
RS-20	04/29/03	1823.77	9.44	1814.33	
RS-20	08/06/03	1823.77	13.63	1810.14	
RS-20	11/04/03	1823.77	19.93	1803.84	
RS-21	01/28/03	1767.36	Dry	---	
RS-21	04/29/03	1767.36	Dry	---	
RS-21	08/06/03	1767.36	14.31	1753.05	
RS-21	11/03/03	1767.36	Dry	---	
RS-22	01/28/03	1771.23	Dry	---	
RS-22	04/29/03	1771.23	30.18	1741.05	
RS-22	08/06/03	1771.23	29.83	1741.40	
RS-22	11/03/03	1771.23	Dry	---	
RS-23	01/27/03	1887.25	Dry	---	
RS-23	04/28/03	1887.25	Dry	---	
RS-23	08/05/03	1887.25	Dry	---	
RS-23	11/04/03	1887.25	Dry	---	
RS-24	01/30/03	1809.24	Dry	---	
RS-24	04/28/03	1809.24	Dry	---	
RS-24	08/07/03	1809.24	Dry	---	
RS-24	11/03/03	1809.24	Dry	---	
RS-25	02/05/03	1862.71	Dry	---	
RS-25	04/29/03	1862.71	13.62	1849.09	
RS-25	08/06/03	1862.71	14.27	1848.44	
RS-25	11/04/03	1862.71	14.68	1848.03	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
RS-27	01/27/03	1804.78	Dry	---	
RS-27	04/28/03	1804.78	Dry	---	
RS-27	08/07/03	1804.78	Dry	---	
RS-27	11/04/03	1804.78	Dry	---	
RS-28	01/27/03	1768.59	Dry	---	
RS-28	04/30/03	1768.59	Dry	---	
RS-28	08/07/03	1768.59	Dry	---	
RS-28	11/04/03	1768.59	Dry	---	
RS-29	01/28/03	1833.09	Dry	---	
RS-29	04/29/03	1833.09	Dry	---	
RS-29	08/06/03	1833.09	Dry	---	
RS-29	11/03/03	1833.09	Dry	---	
RS-30	01/27/03	1909.01	Dry	---	
RS-30	04/28/03	1909.01	19.98	1889.03	
RS-30	08/05/03	1909.01	20.08	1888.93	
RS-30	11/04/03	1909.01	Dry	---	
RS-31	01/27/03	1909.03	Dry	---	
RS-31	04/28/03	1909.03	15.86	1893.17	
RS-31	08/05/03	1909.03	17.13	1891.90	
RS-31	11/04/03	1909.03	Dry	---	
RS-32	01/27/03	1908.99	16.20	1892.79	
RS-32	04/28/03	1908.99	12.47	1896.52	
RS-32	08/05/03	1908.99	15.22	1893.77	
RS-32	11/04/03	1908.99	Dry	---	
RS-54	01/27/03	1846.66	30.27	1816.39	(P)
RS-54	04/28/03	1846.66	29.64	1817.02	
RS-54	08/05/03	1846.66	30.53	1816.13	
RS-54	11/04/03	1846.66	30.77	1815.89	
ES-01	02/03/03	1782.20	Dry	---	(**)
ES-01	05/03/03	1782.20	19.71	1762.49	(**)
ES-01	08/06/03	1782.20	20.18	1762.02	
ES-01	11/05/03	1782.20	18.60	1763.60	
ES-02	01/28/03	1814.60	Dry	---	
ES-02	04/29/03	1814.60	Dry	---	
ES-02	08/06/03	1814.60	Dry	---	
ES-02	11/04/03	1814.60	Dry	---	
ES-03	01/28/03	1783.39	Dry	---	
ES-03	05/06/03	1783.39	Dry	---	(*)
ES-03	08/06/03	1783.39	21.43	1761.96	
ES-03	11/05/03	1783.39	19.71	1763.68	
ES-04	01/28/03	1817.24	Dry	---	
ES-04	04/29/03	1817.24	9.62	1807.62	
ES-04	08/06/03	1817.24	11.57	1805.67	
ES-04	11/04/03	1817.24	Dry	---	
ES-05	01/28/03	1818.13	Dry	---	
ES-05	04/29/03	1818.13	8.20	1809.93	
ES-05	08/06/03	1818.13	11.26	1806.87	
ES-05	11/04/03	1818.13	17.94	1800.19	

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
ES-06	02/03/03	1825.41	Dry	---	(**)
ES-06	05/03/03	1825.41	12.09	1813.32	(**)
ES-06	08/06/03	1825.41	15.00	1810.41	
ES-06	11/04/03	1825.41	17.32	1808.09	
ES-07	01/28/03	1826.53	Dry	---	
ES-07	05/06/03	1826.53	Dry	---	(*)
ES-07	08/06/03	1826.53	Dry	---	
ES-07	11/04/03	1826.53	Dry	---	
ES-08	01/28/03	1826.60	Dry	---	
ES-08	04/29/03	1826.60	Dry	---	
ES-08	08/06/03	1826.60	Dry	---	
ES-08	11/04/03	1826.60	Dry	---	
ES-09	01/28/03	1827.80	Dry	---	
ES-09	04/29/03	1827.80	10.64	1817.16	
ES-09	08/06/03	1827.80	Dry	---	
ES-09	11/04/03	1827.80	Dry	---	
ES-10	01/28/03	1829.46	Dry	---	
ES-10	04/29/03	1829.46	12.02	1817.44	
ES-10	08/06/03	1829.46	20.72	1808.74	
ES-10	11/04/03	1829.46	20.89	1808.57	
ES-11	01/30/03	1835.07	Dry	---	
ES-11	04/29/03	1835.07	19.72	1815.35	
ES-11	08/07/03	1835.07	Dry	---	
ES-11	11/04/03	1835.07	Dry	---	
ES-12	01/27/03	1838.19	19.12	1819.07	
ES-12	04/29/03	1838.19	13.68	1824.51	
ES-12	08/05/03	1838.19	23.81	1814.38	
ES-12	11/04/03	1838.19	24.04	1814.15	
ES-13	01/28/03	1782.58	21.19	1761.39	
ES-13	04/29/03	1782.58	17.18	1765.40	
ES-13	08/06/03	1782.58	17.24	1765.34	
ES-13	11/05/03	1782.58	14.50	1768.08	
ES-14	02/04/03	1728.69	Dry	---	(*)
ES-14	05/06/03	1728.69	Dry	---	(*)
ES-14	08/06/03	1728.69	Dry	---	
ES-14	11/04/03	1728.69	Dry	---	(*)
ES-15	01/28/03	1730.21	Dry	---	
ES-15	04/28/03	1730.21	Dry	---	
ES-15	08/05/03	1730.21	Dry	---	
ES-15	11/03/03	1730.21	Dry	---	
ES-16	01/28/03	1737.90	Dry	---	
ES-16	04/28/03	1737.90	24.26	1713.64	
ES-16	08/05/03	1737.90	Dry	---	
ES-16	11/03/03	1737.90	Dry	---	
ES-17	02/04/03	1739.31	24.87	1714.44	(*)
ES-17	05/06/03	1739.31	24.05	1715.26	(*)
ES-17	08/04/03	1739.31	21.04	1718.27	
ES-17	11/03/03	1739.31	28.15	1711.16	

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
ES-18	01/28/03	1770.25	Dry	---	
ES-18	04/29/03	1770.25	Dry	---	
ES-18	08/06/03	1770.25	Dry	---	
ES-18	11/03/03	1770.25	Dry	---	
ES-19	01/28/03	1769.44	Dry	---	
ES-19	04/29/03	1769.44	Dry	---	
ES-19	08/06/03	1769.44	Dry	---	
ES-19	11/03/03	1769.44	Dry	---	
ES-20	01/28/03	1770.58	Dry	---	
ES-20	04/29/03	1770.58	Dry	---	
ES-20	08/06/03	1770.58	Dry	---	
ES-20	11/03/03	1770.58	Dry	---	
ES-21	02/03/03	1769.62	31.13	1738.49	(**)
ES-21	05/03/03	1769.62	28.89	1740.73	(**)
ES-21	08/06/03	1769.62	29.27	1740.35	
ES-21	11/06/03	1769.62	31.10	1738.52	
ES-22	02/04/03	1770.93	27.90	1743.03	(*)
ES-22	05/06/03	1770.93	25.34	1745.59	(*)
ES-22	08/06/03	1770.93	30.34	1740.59	
ES-22	11/03/03	1770.93	12.22	1758.71	
ES-23	02/04/03	1760.73	12.64	1748.09	(*)
ES-23	05/06/03	1760.73	12.58	1748.15	(*)
ES-23	08/05/03	1760.73	11.47	1749.26	
ES-23	11/06/03	1760.73	12.41	1748.32	
ES-24	02/03/03	1728.67	Dry	---	(**)
ES-24	05/03/03	1728.67	21.48	1707.19	(**)
ES-24	08/06/03	1728.67	26.94	1701.73	
ES-24	11/03/03	1728.67	Dry	---	
ES-25	01/28/03	1737.78	Dry	---	
ES-25	04/28/03	1737.78	Dry	---	
ES-25	08/05/03	1737.78	Dry	---	
ES-25	11/03/03	1737.78	Dry	---	
ES-26	02/04/03	1748.01	28.76	1719.25	(*)
ES-26	05/06/03	1748.01	28.14	1719.87	(*)
ES-26	08/04/03	1748.01	20.46	1727.55	
ES-26	11/03/03	1748.01	28.27	1719.74	
ES-27	02/04/03	1740.67	28.82	1711.85	(*)
ES-27	05/06/03	1740.67	27.83	1712.84	(*)
ES-27	08/04/03	1740.67	21.72	1718.95	
ES-27	11/03/03	1740.67	29.05	1711.62	
ES-28	01/28/03	1759.15	10.18	1748.97	
ES-28	04/28/03	1759.15	9.16	1749.99	
ES-28	08/05/03	1759.15	10.38	1748.77	
ES-28	11/03/03	1759.15	11.43	1747.72	
ES-29	01/28/03	1760.47	11.06	1749.41	
ES-29	04/28/03	1760.47	9.88	1750.59	
ES-29	08/05/03	1760.47	11.18	1749.29	
ES-29	11/03/03	1760.47	12.22	1748.25	

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
ES-30	02/04/03	1759.51	14.65	1744.86	(*)
ES-30	05/06/03	1759.51	15.49	1744.02	(*)
ES-30	08/05/03	1759.51	11.73	1747.78	
ES-30	11/06/03	1759.51	12.50	1747.01	
ES-31	01/30/03	1787.01	19.57	1767.44	
ES-31	04/28/03	1787.01	13.11	1773.90	
ES-31	08/07/03	1787.01	17.63	1769.38	
ES-31	11/06/03	1787.01	20.98	1766.03	
ES-32	01/28/03	1740.65	Dry	---	
ES-32	04/28/03	1740.65	11.53	1729.12	
ES-32	08/04/03	1740.65	19.66	1720.99	
ES-32	11/03/03	1740.65	Dry	---	
HAR-02	01/27/03	1886.38	Dry	---	
HAR-02	05/02/03	1886.38	28.07	1858.31	
HAR-02	08/07/03	1886.38	Dry	---	
HAR-02	11/04/03	1886.38	Dry	---	
HAR-03	01/27/03	1875.48	21.23	1854.25	
HAR-03	04/29/03	1875.48	16.88	1858.60	
HAR-03	08/07/03	1875.48	18.92	1856.56	
HAR-03	11/04/03	1875.48	21.63	1853.85	
HAR-04	02/04/03	1873.40	20.37	1853.03	(*)
HAR-04	04/29/03	1873.40	16.72	1856.68	(*)
HAR-04	08/05/03	1873.40	19.39	1854.01	
HAR-04	11/04/03	1873.40	21.47	1851.93	
HAR-09	01/30/03	1820.62	13.69	1806.93	
HAR-09	04/29/03	1820.62	7.56	1813.06	
HAR-09	08/06/03	1820.62	11.88	1808.74	
HAR-09	11/04/03	1820.62	14.90	1805.72	
HAR-11	01/30/03	1827.90	11.17	1816.73	
HAR-11	04/29/03	1827.90	10.24	1817.66	
HAR-11	08/06/03	1827.90	9.81	1818.09	
HAR-11	11/04/03	1827.90	12.71	1815.19	
HAR-12	01/30/03	1796.73	14.04	1782.69	
HAR-12	04/29/03	1796.73	9.21	1787.52	
HAR-12	08/06/03	1796.73	11.89	1784.84	
HAR-12	11/04/03	1796.73	14.55	1782.18	
HAR-13	01/30/03	1801.18	18.47	1782.71	
HAR-13	04/29/03	1801.18	13.75	1787.43	
HAR-13	08/06/03	1801.18	15.86	1785.32	
HAR-13	11/04/03	1801.18	17.97	1783.21	
HAR-14	01/30/03	1797.02	14.69	1782.33	
HAR-14	04/29/03	1797.02	10.85	1786.17	
HAR-14	08/06/03	1797.02	12.72	1784.30	
HAR-14	11/04/03	1797.02	14.49	1782.53	
HAR-15	01/30/03	1809.69	19.54	1790.15	
HAR-15	04/29/03	1809.69	14.06	1795.63	
HAR-15	08/06/03	1809.69	14.44	1795.25	
HAR-15	11/04/03	1809.69	17.00	1792.69	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Shallow Wells</i>					
HAR-27	01/28/03	1719.39	26.42	1692.97	
HAR-27	04/30/03	1719.39	25.38	1694.01	
HAR-27	08/06/03	1719.39	26.45	1692.94	
HAR-27	11/05/03	1719.39	27.00	1692.39	
HAR-28	01/28/03	1720.17	27.86	1692.31	
HAR-28	04/30/03	1720.17	24.05	1696.12	
HAR-28	08/06/03	1720.17	25.29	1694.88	
HAR-28	11/05/03	1720.17	26.59	1693.58	
HAR-29	01/28/03	1724.13	32.21	1691.92	
HAR-29	04/30/03	1724.13	26.08	1698.05	
HAR-29	08/06/03	1724.13	25.49	1698.64	
HAR-29	11/05/03	1724.13	28.50	1695.63	
HAR-30	01/30/03	1806.47	Dry	---	
HAR-30	04/29/03	1806.47	13.49	1792.98	
HAR-30	08/06/03	1806.47	13.91	1792.56	
HAR-30	11/04/03	1806.47	16.65	1789.82	
HAR-31	01/30/03	1812.45	24.23	1788.22	
HAR-31	04/29/03	1812.45	18.34	1794.11	
HAR-31	08/06/03	1812.45	18.23	1794.22	
HAR-31	11/04/03	1812.45	21.28	1791.17	
HAR-32	01/28/03	1736.58	34.80	1701.78	
HAR-32	04/28/03	1736.58	19.37	1717.21	
HAR-32	08/05/03	1736.58	21.71	1714.87	
HAR-32	11/03/03	1736.58	32.43	1704.15	
HAR-33	01/28/03	1744.66	30.60	1714.06	
HAR-33	04/28/03	1744.66	20.41	1724.25	
HAR-33	08/04/03	1744.66	22.02	1722.64	
HAR-33	11/03/03	1744.66	29.13	1715.53	
HAR-34	01/28/03	1751.17	Dry	---	
HAR-34	04/28/03	1751.17	18.63	1732.54	
HAR-34	08/04/03	1751.17	21.21	1729.96	
HAR-34	11/03/03	1751.17	Dry	---	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-01	01/27/03	1935.89	207.77	1728.12	
RD-01	05/06/03	1935.89	201.33	1734.56	(*)
RD-01	08/05/03	1935.89	206.20	1729.69	
RD-01	11/04/03	1935.89	204.47	1731.42	(*)
RD-02	02/04/03	1873.92	172.32	1701.60	(*)
RD-02	05/06/03	1873.92	170.79	1703.13	(*)
RD-02	08/06/03	1873.92	171.34	1702.58	
RD-02	11/06/03	1873.92	171.15	1702.77	
RD-03	01/28/03	1743.50	19.71	1723.79	
RD-03	04/30/03	1743.50	14.27	1729.23	
RD-03	08/05/03	1743.50	13.00	1730.50	
RD-03	11/05/03	1743.50	15.57	1727.93	
RD-04	01/30/03	1883.85	UTM	---	
RD-04	04/29/03	1883.85	UTM	---	
RD-04	08/06/03	1883.85	340.76	---	
RD-04	11/04/03	1883.85	337.15	---	
RD-05A	01/27/03	1704.66	98.89	1605.77	
RD-05A	04/28/03	1704.66	91.85	1612.81	
RD-05A	08/05/03	1704.66	91.08	1613.58	
RD-05A	11/04/03	1704.66	94.46	1610.20	
RD-05B	01/27/03	1705.89	77.64	1628.25	
RD-05B	04/28/03	1705.89	78.15	1627.74	
RD-05B	08/05/03	1705.89	78.27	1627.62	
RD-05B	11/04/03	1705.89	78.24	1627.65	
RD-05C	01/27/03	1705.25	63.10	1642.15	
RD-05C	04/28/03	1705.25	62.77	1642.48	
RD-05C	08/05/03	1705.25	62.66	1642.59	
RD-05C	11/04/03	1705.25	62.13	1643.12	
RD-06	01/27/03	1617.21	50.89	1566.32	
RD-06	04/28/03	1617.21	48.95	1568.26	
RD-06	08/05/03	1617.21	49.67	1567.54	
RD-06	11/04/03	1617.21	48.55	1568.66	
RD-07	02/05/03	1812.82			(1)
RD-07	04/28/03	1812.82			(1)
RD-07	08/05/03	1812.82			(1)
RD-07	11/04/03	1812.82			(1)
RD-08	01/28/03	1763.38	18.34	1745.04	
RD-08	04/28/03	1763.38	8.80	1754.58	
RD-08	08/06/03	1763.38	10.70	1752.68	
RD-08	11/03/03	1763.38	13.36	1750.02	
RD-09	02/04/03	1768.20	32.95	1735.25	(*)
RD-09	05/06/03	1768.20	33.05	1735.15	(*)
RD-09	08/06/03	1768.20	29.85	1738.35	
RD-09	11/03/03	1768.20	35.41	1732.79	(*)
RD-10	02/05/03	1904.43			(1)
RD-10	04/29/03	1904.43			(1)
RD-10	08/05/03	1904.43			(1)
RD-10	11/04/03	1904.43			(1)

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-11	01/28/03	1762.65	36.44	1726.21	
RD-11	04/29/03	1762.65	21.19	1741.46	
RD-11	08/06/03	1762.65	15.49	1747.16	
RD-11	11/03/03	1762.65	17.02	1745.63	
RD-12	01/28/03	1762.62	22.72	1739.90	
RD-12	04/29/03	1762.62	15.02	1747.60	
RD-12	08/06/03	1762.62	19.55	1743.07	
RD-12	11/03/03	1762.62	23.84	1738.78	
RD-13	01/27/03	1840.27	57.16	1783.11	
RD-13	04/28/03	1840.27	58.08	1782.19	
RD-13	08/05/03	1840.27	58.93	1781.34	
RD-13	11/04/03	1840.27	59.85	1780.42	
RD-14	02/25/03	1824.29	77.47	1746.82	
RD-14	04/29/03	1824.29	78.31	1745.98	
RD-14	08/06/03	1824.29	78.86	1745.43	
RD-14	11/05/03	1824.29	79.82	1744.47	
RD-15	01/30/03	1817.70	58.99	1758.71	
RD-15	04/29/03	1817.70	56.41	1761.29	
RD-15	08/07/03	1817.70	56.11	1761.59	
RD-15	11/05/03	1817.70	58.00	1759.70	
RD-16	01/30/03	1808.99	50.33	1758.66	
RD-16	04/28/03	1808.99	47.01	1761.98	
RD-16	08/07/03	1808.99	48.54	1760.45	
RD-16	11/03/03	1808.99	51.46	1757.53	
RD-17	02/20/03	1836.30	27.17	1809.13	
RD-17	04/29/03	1836.30	25.49	1810.81	
RD-17	08/07/03	1836.30	25.98	1810.32	
RD-17	11/04/03	1836.30	27.84	1808.46	
RD-18	01/27/03	1839.49	88.74	1750.75	
RD-18	04/29/03	1839.49	89.11	1750.38	
RD-18	08/06/03	1839.49	89.25	1750.24	
RD-18	11/04/03	1839.49	90.24	1749.25	
RD-19	02/05/03	1853.13	83.66	1769.47	
RD-19	04/29/03	1853.13	81.15	1771.98	
RD-19	08/06/03	1853.13	79.51	1773.62	
RD-19	11/04/03	1853.13	81.00	1772.13	
RD-20	01/28/03	1819.72	44.87	1774.85	
RD-20	04/28/03	1819.72	43.53	1776.19	
RD-20	08/05/03	1819.72	43.62	1776.10	
RD-20	11/04/03	1819.72	44.93	1774.79	
RD-21	02/05/03	1866.96			(1)
RD-21	05/01/03	1866.96			(1)
RD-21	08/05/03	1866.96			(1)
RD-21	11/04/03	1866.96			(1)
RD-22	02/05/03	1853.41			(1)
RD-22	04/28/03	1853.41			(1)
RD-22	08/05/03	1853.41			(1)
RD-22	11/04/03	1853.41			(1)

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-23	02/05/03	1838.19			(1)
RD-23	05/01/03	1838.19			(1)
RD-23	08/05/03	1838.19			(1)
RD-23	11/04/03	1838.19			(1)
RD-24	02/04/03	1809.93	116.67	1693.26	(*)
RD-24	05/06/03	1809.93	121.54	1688.39	(*) (P)
RD-24	08/07/03	1809.93	48.39	1761.54	
RD-24	11/06/03	1809.93	89.51	1720.42	
RD-25	02/04/03	1810.76	138.43	1672.33	(*)
RD-25	05/06/03	1810.76	144.12	1666.64	(*) (P)
RD-25	08/07/03	1810.76	84.23	1726.53	
RD-25	11/13/03	1810.76	77.52	1733.24	
RD-26	01/28/03	1880.39	115.49	1764.90	
RD-26	05/02/03	1880.39	114.72	1765.67	
RD-26	08/07/03	1880.39	113.43	1766.96	
RD-26	11/05/03	1880.39	115.38	1765.01	
RD-27	02/20/03	1841.67	57.35	1784.32	
RD-27	05/14/03	1841.67	54.33	1787.34	
RD-27	08/04/03	1841.67	UTM	---	
RD-27	11/14/03	1841.67	55.61	1786.06	
RD-28	02/04/03	1810.92	124.25	1686.67	(*)
RD-28	05/06/03	1810.92	130.47	1680.45	(*) (P)
RD-28	08/04/03	1810.92	UTM	---	
RD-28	11/11/03	1810.92	59.67	1751.25	
RD-29	01/27/03	1806.29	18.75	1787.54	
RD-29	04/28/03	1806.29	17.27	1789.02	
RD-29	08/07/03	1806.29	16.67	1789.62	
RD-29	11/04/03	1806.29	17.95	1788.34	
RD-30	01/27/03	1768.69	29.34	1739.35	
RD-30	04/30/03	1768.69	20.08	1748.61	
RD-30	08/07/03	1768.69	20.80	1747.89	
RD-30	11/04/03	1768.69	34.41	1734.28	
RD-31	02/05/03	1945.02			(1)
RD-31	05/01/03	1945.02			(1)
RD-31	08/05/03	1945.02			(1)
RD-31	11/06/03	1945.02			(1)
RD-32	01/27/03	1808.47	30.82	1777.65	
RD-32	04/28/03	1808.47	27.34	1781.13	
RD-32	08/05/03	1808.47	29.13	1779.34	
RD-32	11/03/03	1808.47	30.85	1777.62	
RD-33A	02/05/03	1792.97			(1)
RD-33A	04/28/03	1792.97			(1)
RD-33A	08/05/03	1792.97			(1)
RD-33A	11/04/03	1792.97			(1)
RD-33B	01/27/03	1793.21	288.22	1504.99	
RD-33B	04/28/03	1793.21	288.28	1504.93	
RD-33B	08/05/03	1793.21	288.69	1504.52	
RD-33B	11/04/03	1793.21	287.71	1505.50	

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-33C	02/10/03	1793.54	289.76	1503.78	
RD-33C	04/28/03	1793.54	289.04	1504.50	
RD-33C	08/05/03	1793.54	287.90	1505.64	
RD-33C	11/04/03	1793.54	288.53	1505.01	
RD-34A	01/27/03	1761.83	50.12	1711.71	
RD-34A	04/30/03	1761.83	41.49	1720.34	
RD-34A	08/07/03	1761.83	43.33	1718.50	
RD-34A	11/04/03	1761.83	50.44	1711.39	
RD-34B	01/27/03	1762.51	59.69	1702.82	
RD-34B	04/30/03	1762.51	50.70	1711.81	
RD-34B	08/07/03	1762.51	50.15	1712.36	
RD-34B	11/04/03	1762.51	70.51	1692.00	
RD-34C	01/27/03	1762.60	19.72	1742.88	
RD-34C	04/30/03	1762.60	19.08	1743.52	
RD-34C	08/07/03	1762.60	15.35	1747.25	
RD-34C	11/04/03	1762.60	17.16	1745.44	
RD-35A	01/28/03	1906.68	86.87	1819.81	
RD-35A	04/29/03	1906.68	86.41	1820.27	
RD-35A	08/05/03	1906.68	86.46	1820.22	
RD-35A	11/04/03	1906.68	Dry	---	**
RD-35B	01/27/03	1905.65	85.71	1819.94	
RD-35B	04/29/03	1905.65	85.40	1820.25	
RD-35B	08/05/03	1905.65	85.41	1820.24	
RD-35B	11/04/03	1905.65	132.55	1773.10	**
RD-36A	01/27/03	1913.09	Dry	---	(C)
RD-36A	04/28/03	1913.09	Dry	---	(C)
RD-36A	08/05/03	1913.09	Dry	---	(C)
RD-36A	11/04/03	1913.09	Dry	---	(C)
RD-36B	01/27/03	1915.26	140.41	1774.85	
RD-36B	04/28/03	1915.26	142.12	1773.14	
RD-36B	08/05/03	1915.26	143.48	1771.78	
RD-36B	11/04/03	1915.26	144.63	1770.63	
RD-36C	01/27/03	1913.82	197.37	1716.45	
RD-36C	04/28/03	1913.82	197.38	1716.44	
RD-36C	08/05/03	1913.82	197.81	1716.01	
RD-36C	11/04/03	1913.82	198.52	1715.30	
RD-36D	01/27/03	1920.08	365.03	1555.05	
RD-36D	04/28/03	1920.08	364.92	1555.16	
RD-36D	08/05/03	1920.08	364.77	1555.31	
RD-36D	11/04/03	1920.08	365.47	1554.61	
RD-37	01/27/03	1870.01	325.06	1544.95	
RD-37	04/30/03	1870.01	325.61	1544.40	
RD-37	08/07/03	1870.01	321.99	1548.02	
RD-37	11/06/03	1870.01	321.15	1548.86	
RD-38A	02/13/03	1878.92	106.84	1772.08	
RD-38A	05/02/03	1878.92	108.03	1770.89	
RD-38A	08/05/03	1878.92	109.46	1769.46	
RD-38A	11/04/03	1878.92	111.75	1767.17	**

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-38B	01/27/03	1881.45	327.36	1554.09	
RD-38B	04/28/03	1881.45	326.62	1554.83	
RD-38B	08/05/03	1881.45	326.93	1554.52	
RD-38B	11/04/03	1881.45	328.16	1553.29	**
RD-39A	01/27/03	1960.23	152.67	1807.56	
RD-39A	04/28/03	1960.23	152.33	1807.90	
RD-39A	08/04/03	1960.23	152.64	1807.59	
RD-39A	11/03/03	1960.23	Dry	---	
RD-39B	01/27/03	1959.48	291.58	1667.90	
RD-39B	04/28/03	1959.48	UTM	---	
RD-39B	08/04/03	1959.48	UTM	---	
RD-39B	11/03/03	1959.48	293.50	1665.98	
RD-40	01/28/03	1972.02	285.54	1686.48	
RD-40	04/30/03	1972.02	285.65	1686.37	
RD-40	08/05/03	1972.02	285.34	1686.68	(C)
RD-40	11/05/03	1972.02	285.01	1687.01	(C)
RD-41A	01/28/03	1774.48	35.41	1739.07	
RD-41A	04/30/03	1774.48	25.59	1748.89	
RD-41A	08/05/03	1774.48	32.90	1741.58	
RD-41A	11/05/03	1774.48	48.08	1726.40	
RD-41B	01/28/03	1774.71	125.61	1649.10	
RD-41B	04/30/03	1774.71	116.84	1657.87	
RD-41B	08/05/03	1774.71	116.84	1657.87	
RD-41B	11/05/03	1774.71	129.32	1645.39	
RD-41C	01/28/03	1773.73	148.30	1625.43	
RD-41C	04/30/03	1773.73	144.00	1629.73	
RD-41C	08/05/03	1773.73	141.15	1632.58	
RD-41C	11/05/03	1773.73	143.83	1629.90	
RD-42	01/28/03	1945.46	53.65	1891.81	
RD-42	04/29/03	1945.46	50.74	1894.72	
RD-42	08/05/03	1945.46	47.30	1898.16	
RD-42	11/06/03	1945.46	50.19	1895.27	
RD-43A	01/27/03	1680.16	52.73	1627.43	
RD-43A	04/28/03	1680.16	42.63	1637.53	
RD-43A	08/05/03	1680.16	49.32	1630.84	
RD-43A	11/03/03	1680.16	52.48	1627.68	
RD-43B	01/27/03	1680.21	94.62	1585.59	
RD-43B	04/28/03	1680.21	92.59	1587.62	
RD-43B	08/05/03	1680.21	93.76	1586.45	
RD-43B	11/03/03	1680.21	95.14	1585.07	
RD-43C	01/27/03	1679.31	98.47	1580.84	
RD-43C	04/28/03	1679.31	96.77	1582.54	
RD-43C	08/05/03	1679.31	97.55	1581.76	
RD-43C	11/03/03	1679.31	98.82	1580.49	
RD-44	01/28/03	2035.92	413.55	1622.37	
RD-44	04/30/03	2035.92	413.04	1622.88	
RD-44	08/06/03	2035.92	412.35	1623.57	
RD-44	11/04/03	2035.92	412.18	1623.74	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-45A	01/27/03	1841.59	UTM	---	
RD-45A	04/29/03	1841.59	UTM	---	
RD-45A	08/05/03	1841.59	UTM	---	
RD-45A	11/05/03	1841.59	UTM	---	
RD-45B	01/27/03	1840.09	308.12	1531.97	
RD-45B	04/29/03	1840.09	299.27	1540.82	
RD-45B	08/05/03	1840.09	298.63	1541.46	
RD-45B	11/05/03	1840.09	295.28	1544.81	
RD-45C	01/27/03	1835.74	299.61	1536.13	
RD-45C	04/29/03	1835.74	296.05	1539.69	
RD-45C	08/05/03	1835.74	291.31	1544.43	
RD-45C	11/05/03	1835.74	288.15	1547.59	
RD-46A	01/28/03	1805.80	82.09	1723.71	
RD-46A	04/30/03	1805.80	76.79	1729.01	
RD-46A	08/06/03	1805.80	75.30	1730.50	
RD-46A	11/04/03	1805.80	77.71	1728.09	
RD-46B	01/28/03	1807.19	74.07	1733.12	
RD-46B	04/30/03	1807.19	73.87	1733.32	
RD-46B	08/06/03	1807.19	73.12	1734.07	
RD-46B	11/04/03	1807.19	73.56	1733.63	
RD-47	01/30/03	2045.72	508.78	1536.94	
RD-47	04/29/03	2045.72	503.28	1542.44	
RD-47	08/06/03	2045.72	489.89	1555.83	(C)
RD-47	11/04/03	2045.72	495.62	1550.10	(C)
RD-48A	01/27/03	1736.54	109.12	1627.42	
RD-48A	04/28/03	1736.54	109.75	1626.79	
RD-48A	08/05/03	1736.54	110.27	1626.27	
RD-48A	11/04/03	1736.54	110.57	1625.97	
RD-48B	01/27/03	1735.40	135.23	1600.17	
RD-48B	04/28/03	1735.40	135.23	1600.17	
RD-48B	08/05/03	1735.40	135.47	1599.93	
RD-48B	11/04/03	1735.40	135.45	1599.95	
RD-48C	01/27/03	1734.95	180.36	1554.59	
RD-48C	04/28/03	1734.95	180.26	1554.69	
RD-48C	08/05/03	1734.95	180.05	1554.90	
RD-48C	11/04/03	1734.95	179.93	1555.02	
RD-49A	01/30/03	1867.25	16.68	1850.57	
RD-49A	04/29/03	1867.25	17.28	1849.97	
RD-49A	08/06/03	1867.25	18.25	1849.00	
RD-49A	11/04/03	1867.25	18.32	1848.93	
RD-49B	01/30/03	1867.95	267.01	1600.94	
RD-49B	04/29/03	1867.95	266.74	1601.21	
RD-49B	08/06/03	1867.95	262.21	1605.74	
RD-49B	11/05/03	1867.95	260.22	1607.73	
RD-49C	01/30/03	1869.45	324.97	1544.48	
RD-49C	04/29/03	1869.45	320.35	1549.10	
RD-49C	08/06/03	1869.45	316.05	1553.40	
RD-49C	11/05/03	1869.45	313.85	1555.60	

See last page of Table II for footnotes and explanations.

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-50	02/05/03	1914.88			(1)
RD-50	04/28/03	1914.88			(1)
RD-50	08/05/03	1914.88			(1)
RD-50	11/04/03	1914.88			(1)
RD-51A	01/28/03	1832.51	250.94	1581.57	
RD-51A	04/29/03	1832.51	251.18	1581.33	
RD-51A	08/04/03	1832.51	Dry	---	
RD-51A	11/03/03	1832.51	Dry	---	
RD-51B	01/28/03	1832.68	302.65	1530.03	
RD-51B	04/29/03	1832.68	297.76	1534.92	
RD-51B	08/06/03	1832.68	251.11	1581.57	
RD-51B	11/03/03	1832.68	291.17	1541.51	
RD-51C	01/28/03	1831.65	299.59	1532.06	
RD-51C	04/29/03	1831.65	294.29	1537.36	
RD-51C	08/06/03	1831.65	289.95	1541.70	
RD-51C	11/03/03	1831.65	287.08	1544.57	
RD-52A	01/28/03	1755.09	Dry	---	
RD-52A	04/29/03	1755.09	125.07	1630.02	
RD-52A	08/06/03	1755.09	127.33	1627.76	
RD-52A	11/05/03	1755.09	127.25	1627.84	
RD-52B	01/28/03	1712.15	180.13	1532.02	
RD-52B	04/29/03	1712.15	174.87	1537.28	
RD-52B	08/06/03	1712.15	171.22	1540.93	
RD-52B	11/05/03	1712.15	167.55	1544.60	
RD-52C	01/28/03	1712.83	180.63	1532.20	
RD-52C	04/29/03	1712.83	175.27	1537.56	
RD-52C	08/06/03	1712.83	170.75	1542.08	
RD-52C	11/05/03	1712.83	167.90	1544.93	
RD-53	02/05/03	1909.19			(1)
RD-53	05/01/03	1909.19			(1)
RD-53	08/05/03	1909.19			(1)
RD-53	11/04/03	1909.19			(1)
RD-54A	02/05/03	1841.72			(1)
RD-54A	04/28/03	1841.72			(1)
RD-54A	08/05/03	1841.72			(1)
RD-54A	11/04/03	1841.72			(1)
RD-54B	01/27/03	1842.54	239.83	1602.71	
RD-54B	04/28/03	1842.54	250.01	1592.53	
RD-54B	08/05/03	1842.54	250.23	1592.31	
RD-54B	11/04/03	1842.54	NM	---	
RD-54C	01/27/03	1843.77	227.19	1616.58	
RD-54C	04/28/03	1843.77	227.75	1616.02	
RD-54C	08/05/03	1843.77	227.91	1615.86	
RD-54C	11/04/03	1843.77	228.34	1615.43	
RD-55A	01/28/03	1756.87	36.46	1720.41	
RD-55A	04/28/03	1756.87	22.55	1734.32	
RD-55A	08/04/03	1756.87	23.77	1733.10	
RD-55A	11/03/03	1756.87	29.14	1727.73	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-55B	01/28/03	1757.19	60.61	1696.58	
RD-55B	04/28/03	1757.19	55.27	1701.92	
RD-55B	08/04/03	1757.19	54.89	1702.30	
RD-55B	11/03/03	1757.19	58.21	1698.98	
RD-56A	01/27/03	1758.62	326.91	1431.71	
RD-56A	04/29/03	1758.62	326.97	1431.65	
RD-56A	08/06/03	1758.62	321.78	1436.84	
RD-56A	11/04/03	1758.62	322.54	1436.08	
RD-56B	01/27/03	1761.83	231.46	1530.37	
RD-56B	04/29/03	1761.83	225.01	1536.82	
RD-56B	08/06/03	1761.83	222.00	1539.83	
RD-56B	11/04/03	1761.83	220.23	1541.60	
RD-57	02/05/03	1774.15			(1)
RD-57	04/28/03	1774.15			(1)
RD-57	08/05/03	1774.15			(1)
RD-57	11/04/03	1774.15			(1)
RD-58A	01/27/03	1756.11	90.92	1665.19	
RD-58A	04/28/03	1756.11	88.72	1667.39	
RD-58A	08/04/03	1756.11	86.63	1669.48	
RD-58A	11/03/03	1756.11	87.59	1668.52	
RD-58B	01/27/03	1761.34	113.97	1647.37	
RD-58B	04/28/03	1761.34	110.29	1651.05	
RD-58B	08/04/03	1761.34	108.58	1652.76	
RD-58B	11/03/03	1761.34	110.58	1650.76	
RD-58C	01/27/03	1759.59	129.35	1630.24	
RD-58C	04/28/03	1759.59	125.76	1633.83	
RD-58C	08/04/03	1759.59	125.01	1634.58	
RD-58C	11/03/03	1759.59	127.13	1632.46	
RD-59A	01/31/03	1340.50	25.78	1314.72	
RD-59A	05/15/03	1340.50	25.45	1315.05	
RD-59A	08/08/03	1340.50	27.25	1313.25	
RD-59A	11/14/03	1340.50	26.47	1314.03	
RD-59B	01/31/03	1342.49	-50.82	1393.31	(A)
RD-59B	05/15/03	1342.49	0.00	1342.49	(A)
RD-59B	08/04/03	1342.49	0.00	1342.49	(A)
RD-59B	12/04/03	1342.49	0.00	1342.49	(A)
RD-59C	01/31/03	1345.41	-50.82	1396.23	(A)
RD-59C	05/15/03	1345.41	0.00	1345.41	(A)
RD-59C	08/04/03	1345.41	0.00	1345.41	(A)
RD-59C	12/04/03	1345.41	0.00	1345.41	(A)
RD-60	01/28/03	1870.40	95.13	1775.27	
RD-60	04/29/03	1870.40	99.43	1770.97	
RD-60	08/06/03	1870.40	94.52	1775.88	
RD-60	11/04/03	1870.40	93.23	1777.17	
RD-61	01/28/03	1843.88	108.50	1735.38	
RD-61	04/30/03	1843.88	109.69	1734.19	
RD-61	08/06/03	1843.88	110.49	1733.39	
RD-61	11/04/03	1843.88	UTM	---	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-62	01/27/03	1837.20	210.05	1627.15	
RD-62	04/28/03	1837.20	210.60	1626.60	
RD-62	08/05/03	1837.20	211.02	1626.18	
RD-62	11/04/03	1837.20	211.25	1625.95	
RD-63	02/04/03	1764.85	46.48	1718.37	(*)
RD-63	05/06/03	1764.85	41.38	1723.47	(*)
RD-63	08/07/03	1764.85	34.01	1730.84	
RD-63	11/04/03	1764.85	113.15	1651.70	(P)
RD-64	02/05/03	1857.04			(1)
RD-64	04/28/03	1857.04			(1)
RD-64	08/05/03	1857.04			(1)
RD-64	11/04/03	1857.04			(1)
RD-65	02/05/03	1819.14			(1)
RD-65	04/28/03	1819.14			(1)
RD-65	08/05/03	1819.14			(1)
RD-65	11/04/03	1819.14			(1)
RD-66	01/30/03	1730.79	175.46	1555.33	
RD-66	04/28/03	1730.79	174.62	1556.17	
RD-66	08/05/03	1730.79	175.61	1555.18	
RD-66	11/03/03	1730.79	175.99	1554.80	
RD-67	01/27/03	1901.71	61.94	1839.77	
RD-67	04/28/03	1901.71	61.24	1840.47	
RD-67	08/05/03	1901.71	62.64	1839.07	
RD-67	11/05/03	1901.71	63.75	1837.96	
RD-68A	02/04/03	1307.64	0.00	1307.64	(A)
RD-68A	05/15/03	1307.64	0.00	1307.64	(A)
RD-68A	08/04/03	1307.64	0.00	1307.64	(A)
RD-68A	12/04/03	1307.64	0.00	1307.64	(A)
RD-68B	02/04/03	1312.44	0.00	1312.44	(A)
RD-68B	05/15/03	1312.44	0.00	1312.44	(A)
RD-68B	08/04/03	1312.44	0.00	1312.44	(A)
RD-68B	12/04/03	1312.44	0.00	1312.44	(A)
RD-69	01/28/03	1831.28	58.39	1772.89	
RD-69	04/29/03	1831.28	59.83	1771.45	
RD-69	08/06/03	1831.28	59.52	1771.76	
RD-69	11/05/03	1831.28	60.68	1770.60	
RD-70	01/28/03	1732.26	202.11	1530.15	
RD-70	04/29/03	1732.26	197.39	1534.87	
RD-70	08/06/03	1732.26	192.70	1539.56	(C)
RD-70	11/04/03	1732.26	189.10	1543.16	(C)
RD-71	01/30/03	1740.02	185.22	1554.80	
RD-71	04/28/03	1740.02	185.50	1554.52	
RD-71	08/05/03	1740.02	185.63	1554.39	
RD-71	11/03/03	1740.02	185.91	1554.11	
RD-72	02/05/03	1907.25			(1)
RD-72	05/01/03	1907.25			(1)
RD-72	08/05/03	1907.25			(1)
RD-72	11/06/03	1907.25			(1)

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
RD-73	02/05/03	1901.60			(1)
RD-73	05/01/03	1901.60			(1)
RD-73	08/05/03	1901.60			(1)
RD-73	11/04/03	1901.60			(1)
RD-74	01/27/03	1810.90	Dry	---	
RD-74	04/28/03	1810.90	46.79	1764.11	
RD-74	08/05/03	1810.90	68.21	1742.69	
RD-74	11/04/03	1810.90	Dry	---	
HAR-01	02/05/03	1874.13			(1)
HAR-01	05/01/03	1874.13			(1)
HAR-01	08/05/03	1874.13			(1)
HAR-01	11/04/03	1874.13			(1)
HAR-05	01/30/03	1812.65	25.31	1787.34	
HAR-05	04/29/03	1812.65	20.11	1792.54	
HAR-05	08/06/03	1812.65	20.40	1792.25	
HAR-05	11/04/03	1812.65	23.10	1789.55	
HAR-06	01/30/03	1815.03	25.99	1789.04	
HAR-06	04/29/03	1815.03	19.29	1795.74	
HAR-06	08/06/03	1815.03	20.95	1794.08	
HAR-06	11/04/03	1815.03	24.62	1790.41	
HAR-07	01/30/03	1728.38	72.95	1655.43	
HAR-07	05/06/03	1728.38	75.32	1653.06	(*)
HAR-07	08/06/03	1728.38	56.86	1671.52	
HAR-07	11/05/03	1728.38	72.77	1655.61	
HAR-08	01/28/03	1730.75	45.22	1685.53	
HAR-08	04/30/03	1730.75	35.08	1695.67	
HAR-08	08/06/03	1730.75	36.80	1693.95	
HAR-08	11/05/03	1730.75	43.97	1686.78	
HAR-16	02/05/03	1872.31			(1)
HAR-16	04/30/03	1872.31			(1)
HAR-16	08/05/03	1872.31			(1)
HAR-16	11/04/03	1872.31			(1)
HAR-17	02/04/03	1711.59	26.54	1685.05	(*)
HAR-17	05/06/03	1711.59	22.67	1688.92	(*)
HAR-17	08/06/03	1711.59	22.97	1688.62	
HAR-17	11/03/03	1711.59	26.56	1685.03	
HAR-18	02/04/03	1749.41	29.78	1719.63	(*)
HAR-18	05/06/03	1749.41	29.12	1720.29	(*)
HAR-18	08/04/03	1749.41	22.65	1726.76	
HAR-18	11/03/03	1749.41	25.86	1723.55	
HAR-19	01/30/03	1833.42	Dry	---	
HAR-19	04/29/03	1833.42	Dry	---	
HAR-19	08/06/03	1833.42	Dry	---	
HAR-19	11/04/03	1833.42	Dry	---	
HAR-20	01/30/03	1830.47	Dry	---	
HAR-20	04/29/03	1830.47	Dry	---	
HAR-20	08/06/03	1830.47	222.15	1608.32	
HAR-20	11/04/03	1830.47	222.65	1607.82	

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
HAR-21	01/30/03	1821.30	12.61	1808.69	
HAR-21	04/29/03	1821.30	7.53	1813.77	
HAR-21	08/06/03	1821.30	11.33	1809.97	
HAR-21	11/04/03	1821.30	13.30	1808.00	
HAR-22	01/28/03	1816.41	32.56	1783.85	
HAR-22	04/29/03	1816.41	28.56	1787.85	
HAR-22	08/13/03	1816.41	29.15	1787.26	
HAR-22	11/04/03	1816.41	30.85	1785.56	
HAR-23	01/30/03	1805.87	23.23	1782.64	
HAR-23	04/29/03	1805.87	19.18	1786.69	
HAR-23	08/06/03	1805.87	20.34	1785.53	
HAR-23	11/04/03	1805.87	21.57	1784.30	
HAR-24	02/05/03	1906.89			(1)
HAR-24	05/01/03	1906.89			(1)
HAR-24	08/05/03	1906.89			(1)
HAR-24	11/04/03	1906.89			(1)
HAR-25	01/27/03	1889.75	68.10	1821.65	(C)
HAR-25	04/29/03	1889.75	68.07	1821.68	(C)
HAR-25	08/05/03	1889.75	67.76	1821.99	(C)
HAR-25	11/04/03	1889.75	Dry	---	**
HAR-26	01/28/03	1763.23	22.82	1740.41	
HAR-26	04/29/03	1763.23	16.78	1746.45	
HAR-26	08/06/03	1763.23	19.02	1744.21	
HAR-26	11/03/03	1763.23	23.08	1740.15	
WS-04A	01/28/03	1749.77	217.49	1532.28	
WS-04A	04/29/03	1749.77	213.17	1536.60	
WS-04A	08/07/03	1749.77	208.84	1540.93	
WS-04A	11/05/03	1749.77	205.56	1544.21	
WS-05	02/04/03	1830.20	292.17	1538.03	(*)
WS-05	05/06/03	1830.20	286.22	1543.98	(*)
WS-05	08/06/03	1830.20	284.73	1545.47	(C)
WS-05	11/04/03	1830.20	284.28	1545.92	
WS-06	01/30/03	1932.72	400.15	1532.57	
WS-06	04/29/03	1932.72	395.35	1537.37	
WS-06	08/06/03	1932.72	390.75	1541.97	
WS-06	11/05/03	1932.72	387.50	1545.22	
WS-07	01/28/03	1826.19	68.37	1757.82	
WS-07	04/29/03	1826.19	65.81	1760.38	
WS-07	08/06/03	1826.19	65.24	1760.95	
WS-07	11/06/03	1826.19	66.90	1759.29	
WS-08	01/28/03	1794.39	178.12	1616.27	
WS-08	05/02/03	1794.39	175.81	1618.58	
WS-08	08/06/03	1794.39	172.97	1621.42	
WS-08	11/06/03	1794.39	UTM	---	
WS-09	01/30/03	1883.99	346.82	1537.17	
WS-09	05/06/03	1883.99	357.98	1526.01	(*)
WS-09	08/06/03	1883.99	358.21	1525.78	(*) (C)
WS-09	11/05/03	1883.99	331.98	1552.01	(C)

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Well Identifier	Date of Measurement	Reference Point Elevation (feet above MSL)	Depth to Water (feet)	Static Water Level Elevation (feet above MSL)	Footnotes
<i>Chatsworth Formation Wells</i>					
WS-09A	01/27/03	1647.61	36.07	1611.54	(*) (P)
WS-09A	05/06/03	1647.61	38.43	1609.18	
WS-09A	08/05/03	1647.61	32.31	1615.30	
WS-09A	11/04/03	1647.61	37.24	1610.37	
WS-09B	01/30/03	1796.89	175.48	1621.41	
WS-09B	04/29/03	1796.89	167.73	1629.16	
WS-09B	08/06/03	1796.89	161.90	1634.99	
WS-09B	11/04/03	1796.89	162.92	1633.97	
WS-11	01/28/03	1748.70	56.02	1692.68	
WS-11	04/28/03	1748.70	47.94	1700.76	
WS-11	08/05/03	1748.70	49.40	1699.30	
WS-11	11/03/03	1748.70	55.38	1693.32	
WS-12	02/05/03	1705.98	173.28	1532.70	
WS-12	04/29/03	1705.98	168.33	1537.65	
WS-12	08/06/03	1705.98	164.34	1541.64	
WS-12	11/05/03	1705.98	161.14	1544.84	
WS-13	01/28/03	1658.62	126.57	1532.05	
WS-13	04/29/03	1658.62	121.21	1537.41	
WS-13	08/06/03	1658.62	117.06	1541.56	
WS-13	11/05/03	1658.62	113.22	1545.40	
WS-14	01/27/03	1878.23	358.34	1519.89	
WS-14	04/29/03	1878.23	356.14	1522.09	
WS-14	08/07/03	1878.23	354.48	1523.75	
WS-14	11/05/03	1878.23	352.80	1525.43	
WS-SP	01/28/03	1766.76	30.58	1736.18	
WS-SP	04/29/03	1766.76	27.78	1738.98	
WS-SP	08/06/03	1766.76	28.47	1738.29	
WS-SP	11/03/03	1766.76	29.21	1737.55	
OS-24	02/05/03	1947.30			(1)
OS-24	04/28/03	1947.30			(1)
OS-24	08/04/03	1947.30			(1)
OS-24	11/03/03	1947.30			(1)
OS-25	01/28/03	2043.58	Dry	---	
OS-25	05/15/03	2043.58	Dry	---	
OS-25	08/04/03	2043.58	UTM	---	
OS-25	11/04/03	2043.58	Dry	---	
OS-26	01/28/03	2080.58	221.56	1859.02	
OS-26	05/02/03	2080.58	224.15	1856.43	
OS-26	08/04/03	2080.58	228.92	1851.66	
OS-26	11/04/03	2080.58	231.13	1849.45	

See last page of Table II for footnotes and explanations.

Haley & Aldrich, Inc.

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27-February-2004

TABLE II
FOOTNOTES AND EXPLANATIONS

(*)	=	Water level measured by EnviroSolve Corporation.
(**)	=	Water level measured by MWH.
(A)	=	Artesian.
(C)	=	Depth to water measured from top of casing. During the monitoring period, pumps had been removed from several wells to allow hydrogeologic testing.
(ft btc)	=	Feet below top of casing.
(P)	=	Pumping water level.
MSL	=	Mean Sea Level.
NM	=	Not monitored.
UTM	=	Unable to measure.
(--)	=	No data available/not applicable.

A negative value in the Depth to Water column indicates the head above the reference point elevation.

(1)	=	FLUTe installed in well. Water level could not be measured. The C-1 pumping test started August 25, 2003 and may have impacted the water level measurements for HAR-01, HAR-16, HAR-24, RD-10, RD-31, RD-53, RD-72, and RD-73. Water levels recorded by dataloggers at saturated ports were provided by MWH for wells listed in the following table.
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TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)		
HAR-01	02/05/03	15:44	4	43 - 48	Dry		
			5	53 - 58	50.1		
			6	63 - 68	51.471		
			7	73 - 78	51.714		
			8	83 - 88	51.598		
			9	93 - 98	50.461		
			10	103 - 108	51.636		
	04/30/03	No data available from datalogger 2nd quarter 2003					
	08/21/03	13:51	1	13 - 18	---		
			2	23 - 28	---		
			3	33 - 38	Dry		
			4	43 - 48	Dry		
			5	53 - 58	Dry		
			6	63 - 68	56.921		
			7	73 - 78	57.258		
			8	83 - 88	57.075		
			9	93 - 98	57.280		
			10	103 - 108	57.088		
11/04/03	13:17	1	13 - 18	---			
		2	23 - 28	---			
		3	33 - 38	Dry			
		4	43 - 48	Dry			
		5	53 - 58	Dry			
		6	63 - 68	60.544			
		7	73 - 78	60.892			
		8	83 - 88	60.803			
		9	93 - 98	61.012			
		10	103 - 108	60.824			
HAR-16	02/05/03	15:06	3	19 - 24	Dry		
			4	29 - 34	Dry		
			5	39 - 44	NM		
			6	49 - 54	45.127		
			7	59 - 64	46.144		
			8	69 - 74	46.694		
			9	79 - 84	---		
			10	89 - 94	46.864		
			11	99 - 104	---		
			12	109 - 114	---		
			04/30/03	14:26	3	19 - 24	Dry
					4	29 - 34	Dry
	5	39 - 44			40.876		
	6	49 - 54			45.201		
	7	59 - 64			45.125		
	8	69 - 74			45.427		
	08/21/03	14:12	9	79 - 84	---		
			10	89 - 94	45.925		
11			99 - 104	45.433			
12			109 - 114	48.395			
3			19 - 24	---			
4			29 - 34	---			
5	39 - 44	40.817					

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
HAR-16	08/21/03	14:12	6	49 - 54	Dry
			7	59 - 64	52.604
			8	69 - 74	52.956
			9	79 - 84	---
			10	89 - 94	57.565
			11	99 - 104	53.211
			12	109 - 114	55.650
	11/04/03	13:17	3	19 - 24	---
			4	29 - 34	---
			5	39 - 44	40.774
			6	49 - 54	Dry
			7	59 - 64	60.685
			8	69 - 74	70.527
			9	79 - 84	---
			10	89 - 94	86.964
			11	99 - 104	77.649
			12	109 - 114	82.398
HAR-24	02/05/03	11:40	1	37 - 42	Dry
			2	47 - 52	Dry
			3	57 - 62	Dry
			4	67 - 72	Dry
			5	77 - 82	Dry
			6	87 - 92	Dry
			7	97 - 102	100.821
			8	107 - 112	101.034
	04/30/03	11:40	1	37 - 42	Dry
			2	47 - 52	Dry
			3	57 - 62	Dry
			4	67 - 72	Dry
			5	77 - 82	Dry
			6	87 - 92	81.685
			7	97 - 102	81.689
			8	107 - 112	81.662
	08/21/03	14:42	1	37 - 42	Dry
			2	47 - 52	Dry
			3	57 - 62	Dry
			4	67 - 72	Dry
			5	77 - 82	Dry
			6	87 - 92	87.080
			7	97 - 102	87.437
			8	107 - 112	87.242
	11/04/03	13:17	1	37 - 42	Dry
			2	47 - 52	Dry
			3	57 - 62	Dry
			4	67 - 72	Dry
			5	77 - 82	Dry
			6	87 - 92	88.557
			7	97 - 102	98.450
			8	107 - 112	97.347

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
OS-24	02/05/03	No datalogger installed 1st quarter 2003			
	04/30/03	No datalogger installed 2nd quarter 2003			
	08/21/03	No datalogger installed 3rd quarter 2003			
	11/03/03	No datalogger installed 4th quarter 2003			
RD-07	02/05/03	No data available from datalogger 1st quarter 2003			
	04/30/03	No data available from datalogger 2nd quarter 2003			
	08/21/03	No data available from datalogger 3rd quarter 2003			
	11/04/03	No data available from datalogger 4th quarter 2003			
RD-10	02/05/03	Data not downloaded from datalogger 1st quarter 2003			
	04/30/03	No datalogger installed 2nd quarter 2003			
	08/25/03	11:00	1	171 - 181	Dry
			2	191 - 201	183.298
			3	211 - 221	182.240
			4	231 - 241	182.154
			5	251 - 261	181.571
			6	271 - 281	182.294
			7	291 - 301	NM
			8	311 - 321	182.413
			9	331 - 341	182.033
			10	351 - 361	181.965
			11	371 - 381	182.186
			12	391 - 401	182.130
	11/04/03	13:17	1	171 - 181	Dry
			2	191 - 201	183.284
			3	211 - 221	181.682
			4	231 - 241	181.619
			5	251 - 261	181.003
			6	271 - 281	181.817
			7	291 - 301	NM
			8	311 - 321	181.990
			9	331 - 341	181.625
			10	351 - 361	180.919
			11	371 - 381	181.746
			12	391 - 401	181.676
RD-21	02/05/03	15:30	1	85 - 95	Dry
			2	105 - 115	90.46
			3	125 - 135	90.266
			4	145 - 155	90.366
			5	165 - 175	90.489
	04/30/03	10:27	1	85 - 95	Dry
			2	105 - 115	91.249
			3	125 - 135	91.070
			4	145 - 155	92.510
			5	165 - 175	91.361
	08/28/03	15:51	1	85 - 95	Dry
			2	105 - 115	98.646
			3	125 - 135	97.487
			4	145 - 155	98.015
			5	165 - 175	95.824

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-21	10/19/03	18:58	1	85 - 95	Dry
			2	105 - 115	93.142
			3	125 - 135	93.005
			4	145 - 155	97.041
			5	165 - 175	93.882
RD-22	02/05/03	No datalogger installed 1st quarter 2003			
	04/30/03	8:29	1	310 - 320	298.174
			2	330 - 340	298.079
			3	350 - 360	298.360
			4	370 - 380	298.559
			5	390 - 400	298.760
			6	410 - 420	298.756
			7	430 - 440	---
	08/04/03	12:10	1	310 - 320	298.431
			2	330 - 340	298.223
			3	350 - 360	298.476
			4	370 - 380	298.645
			5	390 - 400	298.499
			6	410 - 420	298.482
			7	430 - 440	---
	11/04/03	16:02	1	310 - 320	298.359
			2	330 - 340	298.094
			3	350 - 360	298.360
			4	370 - 380	298.617
			5	390 - 400	298.456
			6	410 - 420	298.482
			7	430 - 440	435.755
RD-23	02/05/03	No data available from datalogger 1st quarter 2003			
	04/30/03	15:37	1	231 - 241	---
			2	251 - 261	---
			3	271 - 281	---
			4	291 - 301	---
			5	311 - 321	---
			6	331 - 341	---
			7	351 - 361	---
			8	371 - 381	---
			9	391 - 396	381.257
	08/01/03	No data available 3rd quarter 2003			
	11/04/03	14:55	1	231 - 241	---
			2	251 - 261	---
			3	271 - 281	---
			4	291 - 301	---
			5	311 - 321	---
			6	331 - 341	---
			7	351 - 361	---
			8	371 - 381	---
			9	391 - 401	---
			10	411 - 416	---

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-31	02/05/03	16:55	3	88 - 98	---
			4	108 - 118	---
			5	128 - 138	117.743
			6	148 - 158	116.729
			7	168 - 178	116.321
	04/30/03	10:55	3	88 - 98	---
			4	108 - 118	---
			5	128 - 138	125.196
			6	148 - 158	125.222
			7	168 - 178	124.707
	08/21/03	13:09	1	48 - 58	Dry
			2	68 - 78	Dry
			3	88 - 98	Dry
			4	108 - 118	Dry
			5	128 - 138	125.738
			6	148 - 158	125.770
			7	168 - 178	125.227
	11/06/03	13:17	1	48 - 58	Dry
			2	68 - 78	Dry
			3	88 - 98	Dry
			4	108 - 118	Dry
			5	128 - 138	135.153
			6	148 - 158	155.052
			7	168 - 178	167.743
RD-33A	02/05/03	No data available from datalogger 1st quarter 2003			
	05/12/03	15:02	1	211 - 221	208.962
			2	231 - 241	209.270
			3	251 - 261	209.540
			4	271 - 281	209.442
			5	291 - 301	209.492
			6	311 - 321	209.893
	08/04/03	9:02	1	211 - 221	208.481
			2	231 - 241	209.006
			3	251 - 261	208.898
			4	271 - 281	208.727
			5	291 - 301	209.099
			6	311 - 321	209.514
	11/04/03	12:10	1	211 - 221	206.791
			2	231 - 241	207.301
			3	251 - 261	207.165
			4	271 - 281	207.037
			5	291 - 301	207.337
			6	311 - 321	207.752
RD-50	02/05/03	14:47	1	106 - 116	Dry
			2	126 - 136	113.406
			3	146 - 156	Dry
			4	166 - 176	113.306
			5	186 - 196	113.406
	04/30/03	14:51	1	106 - 116	106.893
			2	126 - 136	111.965
			3	146 - 156	---

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-50	04/30/03	14:51	4	166 - 176	111.995
			5	186 - 196	112.100
	08/04/03	8:51	1	106 - 116	107.081
			2	126 - 136	113.516
			3	146 - 156	---
			4	166 - 176	113.723
			5	186 - 196	113.901
	10/18/03	13:28	1	106 - 116	112.533
			2	126 - 136	114.166
			3	146 - 156	---
			4	166 - 176	114.302
			5	186 - 196	114.514
RD-53	02/05/03	11:54	1	74 - 79	---
			2	84 - 89	Dry
			3	94 - 99	Dry
			4	104 - 109	Dry
			5	114 - 119	110.53
			6	124 - 129	123.737
			7	134 - 139	129.325
			8	144 - 149	128.423
			9	154 - 159	137.633
	04/30/03	Batteries failed, no data available 2nd quarter 2003			
	08/21/03	12:14	1	74 - 79	---
			2	84 - 89	Dry
			3	94 - 99	Dry
			4	104 - 109	Dry
			5	114 - 119	109.746
			6	124 - 129	Dry
			7	134 - 139	Dry
			8	144 - 149	140.235
			9	154 - 159	140.342
	11/04/03	13:17	1	74 - 79	---
			2	84 - 89	Dry
			3	94 - 99	Dry
			4	104 - 109	Dry
			5	114 - 119	116.116
			6	124 - 129	Dry
			7	134 - 139	Dry
			8	144 - 149	142.023
			9	154 - 159	142.109
RD-54A	08/27/03	9:51	1	150.5 - 160.5	224.854
			2	170.5 - 180.5	142.569
			3	190.5 - 200.5	146.455
			4	210.5 - 220.5	149.410
			5	230.5 - 240.5	---
			6	250.5 - 260.5	---
			7	270.5 - 280.5	176.351
	11/04/03	16:29	1	150.5 - 160.5	---
			2	170.5 - 180.5	149.183
			3	190.5 - 200.5	153.055
			4	210.5 - 220.5	155.763

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-54A	11/04/03	16:29	5	230.5 - 240.5	---
			6	250.5 - 260.5	---
			7	270.5 - 280.5	182.994
RD-57	02/05/03	11:58	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	350.354
			8	368 - 378	348.704
			9	388 - 398	347.792
			10	408 - 418	346.781
	04/30/03	9:12	1	228 - 238	---
			2	248 - 258	---
			3	268 - 278	---
			4	288 - 298	---
			5	308 - 318	---
			6	328 - 338	---
			7	348 - 358	---
			8	368 - 378	---
			9	388 - 398	346.458
			10	408 - 418	345.727
	08/28/03	9:34	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	343.939
			8	368 - 378	347.893
		9:33	9	388 - 398	347.004
			10	408 - 418	346.002
	11/04/03	8:54	1	228 - 238	Dry
			2	248 - 258	Dry
			3	268 - 278	Dry
			4	288 - 298	Dry
			5	308 - 318	Dry
			6	328 - 338	Dry
			7	348 - 358	346.974
			8	368 - 378	351.004
			9	388 - 398	350.168
			10	408 - 418	349.136
RD-64	02/05/03	14:11	1	170.5 - 180.5	Dry
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	217.255
			4	230.5 - 240.5	230.588
		14:17	5	250.5 - 260.5	227.358
			6	270.5 - 280.5	230.46
			7	290.5 - 300.5	230.601
			8	310.5 - 320.5	230.471

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-64		14:17	9	330.5 - 340.5	230.787
			10	350.5 - 360.5	230.789
			11	370.5 - 380.5	232.972
			12	390.5 - 400.5	231.067
	04/30/03	Batteries failed, no data available 2nd quarter 2003			
	08/04/03	8:55	1	170.5 - 180.5	Dry
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	Dry
			4	230.5 - 240.5	148.859
			5	250.5 - 260.5	---
			6	270.5 - 280.5	---
			7	290.5 - 300.5	---
			8	310.5 - 320.5	---
			9	330.5 - 340.5	---
			10	350.5 - 360.5	---
			11	370.5 - 380.5	---
			12	390.5 - 400.5	---
	11/04/03	8:55	1	170.5 - 180.5	Dry
			2	190.5 - 200.5	Dry
			3	210.5 - 220.5	---
			4	230.5 - 240.5	---
	10/22/03	16:00	5	250.5 - 260.5	233.489
			6	270.5 - 280.5	234.517
			7	290.5 - 300.5	---
			8	310.5 - 320.5	234.606
			9	330.5 - 340.5	---
			10	350.5 - 360.5	234.887
			11	370.5 - 380.5	235.151
			12	390.5 - 400.5	235.272
RD-65	02/05/03	14:22	1	168.5 - 178.5	Dry
			2	188.5 - 198.5	Dry
			3	208.5 - 218.5	Dry
			4	228.5 - 238.5	171.815
			5	248.5 - 258.5	230.451
			6	268.5 - 278.5	241.331
			7	288.5 - 298.5	256.081
			8	308.5 - 318.5	293.721
		14:24	9	328.5 - 338.5	235.052
			10	348.5 - 358.5	231.426
			11	368.5 - 378.5	236.205
			12	388.5 - 398.5	388.78
	04/30/03	Hydraulic testing (MWH), no data available 2nd quarter 2003			
	08/04/03	13:01	1	168.5 - 178.5	Dry
			2	188.5 - 198.5	Dry
			3	208.5 - 218.5	Dry
			4	228.5 - 238.5	222.798
			5	248.5 - 258.5	224.887
			6	268.5 - 278.5	228.856
			7	288.5 - 298.5	209.664
			8	308.5 - 318.5	235.054
			9	328.5 - 338.5	---

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-65	08/04/03	13:01	10	348.5 - 358.5	---
			11	368.5 - 378.5	---
			12	388.5 - 398.5	---
	11/04/03	13:30	1	168.5 - 178.5	Dry
			2	188.5 - 198.5	Dry
			3	208.5 - 218.5	Dry
			4	228.5 - 238.5	222.973
			5	248.5 - 258.5	224.405
			6	268.5 - 278.5	228.52
			7	288.5 - 298.5	---
			8	308.5 - 318.5	234.725
			9	328.5 - 338.5	250.255
			10	348.5 - 358.5	---
			11	368.5 - 378.5	251.198
			12	388.5 - 398.5	392.766
RD-72	02/05/03	15:29	2	65 - 75	Dry
			3	85 - 95	88.608
			4	105 - 115	88.158
			5	125 - 135	87.88
			6	145 - 155	86.041
			7	165 - 175	NM
			8	185 - 195	83.624
	04/30/03	15:29	2	65 - 75	---
			3	85 - 95	92.068
			4	105 - 115	92.831
			5	125 - 135	92.641
			6	145 - 155	91.510
			7	165 - 175	---
			8	185 - 195	89.535
	08/21/03	13:06	2	65 - 75	Dry
			3	85 - 95	Dry
			4	105 - 115	92.974
			5	125 - 135	92.743
			6	145 - 155	91.918
			7	165 - 175	---
			8	185 - 195	89.783
	11/06/03	13:17	2	65 - 75	Dry
			3	85 - 95	Dry
			4	105 - 115	103.032
			5	125 - 135	103.518
			6	145 - 155	106.276
			7	165 - 175	---
			8	185 - 195	108.747
RD-73	02/05/03	14:25	5	67 - 72	Dry
			6	77 - 82	74.355
			7	87 - 92	74.811
			8	97 - 102	73.869
			9	107 - 112	74.735
			10	117 - 122	NM
			11	127 - 132	74.933
			12	137 - 140	76.945

TABLE II
FOOTNOTES AND EXPLANATIONS

Well	Date	Time	Port	Spacer Interval	DTW (ft btc)
RD-73	04/30/03	Batteries failed, no data available 2nd quarter 2003			
	08/21/03	13:07	1	27 - 32	---
			2	37 - 42	---
			3	47 - 52	---
			4	57 - 62	Dry
			5	67 - 72	Dry
			6	77 - 82	Dry
			7	87 - 92	79.535
			8	97 - 102	79.608
			9	107 - 112	79.420
			10	117 - 122	---
			11	127 - 132	79.652
			12	137 - 140	79.711
	11/04/03	13:17	4	57 - 62	Dry
			5	67 - 72	Dry
			6	77 - 82	Dry
			7	87 - 92	88.458
			8	97 - 102	98.323
			9	107 - 112	108.065
			10	117 - 122	---
			11	127 - 132	109.011
			12	137 - 140	109.058

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	SH-03	SH-04	SH-04	SH-11	SH-11	SH-11
FLUTE Sample Port	---	---	---	---	---	---
Sample Date	05/02/03	04/14/03	04/14/03	02/21/03	08/25/03	08/25/03
Sample Type	Primary	Primary	Split	Primary	Primary	Dup
Sample Qualifier	---	---	---	pH	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	8.3 J	4	4	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	2.9 U	0.58 U	0.4 U	0.29 U	0.24 U	0.24 U
1,1,2-Trichloroethane	3 U	0.6 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	43	14	12	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	9.1 J	5 J	4.3	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	3.2 U	0.64 U	0.2 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	360	6.2	7.3	0.35 J	0.28 U	0.28 U
1,2-Dichloropropane	3.5 U	0.7 U	0.4 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	3.5 U	0.7 U	0.2 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	3.7 U	0.74 U	0.2 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	29	---	---	---	---
2-Butanone	38 U	7.6 U	7 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	0.3 U	0.3 U	---	---	---
2-Hexanone	25 U	5 U	0.7 U	2.5 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	25 U	5 U	0.2 U	2.5 U	2.5 U	2.5 U
Acetone	45 U	9 U	3 U	4.5 U	4.5 U	4.5 U
Benzene	2.8 U	0.56 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	3 U	0.6 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	2.5 U	0.5 U	0.4 U	0.25 U	0.32 U	0.32 U
Bromomethane	2 U	0.4 U	0.5 U	0.2 U	0.34 U	0.34 U
Carbon disulfide	3.3 U	0.66 U	0.2 U	0.33 U	0.48 U	0.48 U
Carbon tetrachloride	520	170	170	0.28 U	0.28 U	0.28 U
Chlorobenzene	3.6 U	0.72 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	3.3 U	0.66 U	0.3 U	0.33 U	0.33 U	0.33 U
Chloroform	720	51	50	0.33 U	0.33 U	0.33 U
Chloromethane	1.4 U	0.28 U	0.4 U	0.14 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	33	11	10	0.44 J	0.59 J	0.63 J
cis-1,3-Dichloropropene	2.2 U	0.44 U	0.2 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	2.8 U	0.56 U	0.2 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	2.5 U	0.5 U	0.2 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	3.8 U	0.76 U	0.3 U	0.38 U	0.52 U	0.52 U
Methylene chloride	3.3 U	1.3 U	3 U	0.33 U	0.48 U	0.48 U
o-Xylene	2.4 U	0.48 U	0.2 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	20	13	16	0.32 U	0.32 U	0.32 U
Toluene	4.9 U	0.98 U	0.2 U	0.49 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	2.7 U	0.54 U	0.2 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	2.4 U	0.48 U	0.2 U	0.24 U	0.24 U	0.24 U
Trichloroethene	190	69	70	0.26 J,C	0.26 U	0.26 U
Trichlorofluoromethane	3.4 U	0.68 U	0.1 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	130	---	54	1.2 U	1.2 U	1.2 U
Vinyl chloride	1.9 U	0.38 U	0.2 U	0.19 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	AMA	DMA	DMA	DMA

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RS-07	RS-07	RS-08	RS-08	RS-10	RS-10
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	02/21/03	08/22/03	04/14/03	04/14/03	02/26/03	02/26/03
Sample Type	Primary	Primary	Primary	Split	Primary	Dup
Sample Qualifier	---	---	pH	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.29 U	0.4 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U
1,4-Dioxane	---	---	0.07 U	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	7 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	0.3 U	0.3 U	---	---
2-Hexanone	2.5 U	2.6 U	2.5 U	0.7 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U
Acetone	6.6 J	4.5 U	4.9 UJ	3 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.25 U	0.4 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.34 U	0.2 U	0.5 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.48 U	0.33 U	0.2 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U
Chloromethane	0.23 J	0.3 U	0.14 U	0.4 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	7.8	6.3	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.38 U	0.3 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.48 U	0.33 U	3 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	0.49 U	0.2 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.91 J	0.75	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.2 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	---	0.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.75 J	0.2 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	AMA	DMA	DMA

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See last page of Table III for footnotes and explanations.

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TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RS-11	RS-11	RS-13	RS-13	RS-18	RS-19
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	05/01/03	05/01/03	02/21/03	02/21/03	05/02/03	05/01/03
Sample Type	Primary	Dup	Primary	Dup	Primary	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.3 J	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.61 J	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.14 J	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	17	1.5
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table III for footnotes and explanations.

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TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RS-30	RS-31	RS-32	ES-03	ES-04	ES-05
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	05/01/03	05/01/03	02/25/03	12/10/03	05/14/03	05/14/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	pH	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.62 J	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	7.9 J	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	4.8	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	68	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	36	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.76 J	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	15	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.52 J	130	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.19 U	3.7	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	ES-06	ES-09	ES-10	ES-11	ES-12	ES-17
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	05/14/03	05/01/03	05/01/03	05/14/03	02/27/03	05/16/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	2.2 J
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	1.4 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.6 J
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	12
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.6 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.8 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	1.8 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	1.8 U
1,4-Dioxane	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	19 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	12 U
Acetone	9.1 J,L	4.5 U	4.5 U	6.1 J,L	4.5 U	22 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.5 U
Bromoform	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	1 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.6 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	1.8 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.6 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.6 U
Chloromethane	0.32 J	0.14 U	0.14 U	0.14 U	0.14 U	0.7 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	190
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	1.1 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.4 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	1.2 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	1.9 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.6 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1.6 U
Toluene	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	2.4 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.4 J
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	1.2 U
Trichloroethene	10	0.26 U	0.26 U	6.3	0.26 U	530
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1.7 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	6400
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.95 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

Haley & Aldrich, Inc.

See last page of Table III for footnotes and explanations.

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27-February-2004

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	ES-17	ES-22	ES-23	ES-23	ES-26	ES-26
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	08/25/03	12/10/03	02/20/03	08/25/03	02/20/03	08/25/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	30 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
1,1,2,2-Tetrachloroethane	24 U	0.24 U	0.29 U	0.24 U	1.4 U	0.24 U
1,1,2-Trichloroethane	30 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
1,1-Dichloroethane	27 U	0.27 U	0.27 U	0.27 U	1.4 U	0.27 U
1,1-Dichloroethene	32 U	0.32 U	0.32 U	0.55 J	1.6 U	0.32 U
1,2-Dichlorobenzene	32 U	0.32 U	0.32 U	0.32 U	1.6 U	0.32 U
1,2-Dichloroethane	28 U	0.28 U	0.28 U	0.28 U	1.4 U	0.28 U
1,2-Dichloropropane	35 U	0.35 U	0.35 U	0.35 U	1.8 U	0.35 U
1,3-Dichlorobenzene	35 U	0.35 U	0.35 U	0.35 U	1.8 U	0.35 U
1,4-Dichlorobenzene	37 U	0.37 U	0.37 U	0.37 U	1.8 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Butanone	380 U	3.8 U	3.8 U	3.8 U	19 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	260 U	2.6 U	2.5 U	2.6 U	12 U	2.6 U
4-Methyl-2-pentanone (MIBK)	250 U	2.5 U	2.5 U	2.5 U	12 U	2.5 U
Acetone	710 J	4.5 U	14	4.5 U	22 U	8.1 U
Benzene	28 U	0.28 U	0.28 U	0.28 U	1.4 U	0.28 U
Bromodichloromethane	30 U	0.3 U	0.3 U	0.3 U	1.5 U	0.3 U
Bromoform	32 U	0.32 U	0.25 U	0.32 U	1.2 U	0.32 U
Bromomethane	34 U	0.34 U	0.2 U	0.34 U	1 U	0.34 U
Carbon disulfide	48 U	0.48 U	0.33 U	0.48 U	1.6 U	0.48 U
Carbon tetrachloride	28 U	0.28 U	0.28 U	0.28 U	1.4 U	0.28 U
Chlorobenzene	36 U	0.36 U	0.36 U	0.36 U	1.8 U	0.36 U
Chloroethane	33 U	0.33 U	0.33 U	0.33 U	1.6 U	0.33 U
Chloroform	33 U	0.33 U	0.33 U	0.33 U	1.6 U	0.33 U
Chloromethane	30 U	0.3 U	0.28 J	0.3 U	0.7 U	0.3 U
cis-1,2-Dichloroethene	230	18	0.32 U	2.1	1.6 U	0.32 U
cis-1,3-Dichloropropene	22 U	0.22 U	0.22 U	0.22 U	1.1 U	0.22 U
Dibromochloromethane	28 U	0.28 U	0.28 U	0.28 U	1.4 U	0.28 U
Ethylbenzene	25 U	0.25 U	0.25 U	0.25 U	1.2 U	0.25 U
m,p-Xylenes	52 U	0.52 U	0.38 U	0.52 U	1.9 U	0.52 U
Methylene chloride	48 U	0.48 U	0.33 U	1.3 J,L	1.6 U	0.48 U
o-Xylene	24 U	0.24 U	0.24 U	0.24 U	1.2 U	0.24 U
Tetrachloroethene	32 U	0.32 U	0.32 U	0.32 U	1.6 U	0.32 U
Toluene	36 U	0.36 U	0.49 U	0.36 U	2.4 U	0.36 U
trans-1,2-Dichloroethene	27 U	0.77 J	0.27 U	0.27 U	1.4 U	0.27 U
trans-1,3-Dichloropropene	24 U	0.24 U	0.24 U	0.24 U	1.2 U	0.24 U
Trichloroethene	1600	140	19	43	38	37
Trichlorofluoromethane	34 U	0.34 U	0.34 U	0.34 U	1.7 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	9600	1.2 U	1.2 U	1.2 U	330	140
Vinyl chloride	26 U	0.26 U	0.19 U	0.26 U	0.95 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	ES-27	ES-27	ES-30	ES-30	ES-30	ES-31
FLUTE Sample Port	---	---	---	---	---	---
Sample Date	02/20/03	08/25/03	02/20/03	02/20/03	08/25/03	02/19/03
Sample Type	Primary	Primary	Primary	Split	Primary	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	15 U	6 U	0.3 U	0.2 U	0.7 J	0.3 U
1,1,2,2-Tetrachloroethane	14 U	4.8 U	0.29 U	0.4 U	0.24 U	0.29 U
1,1,2-Trichloroethane	15 U	6 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1-Dichloroethane	14 U	5.4 U	0.27 U	0.2 U	0.27 U	0.27 U
1,1-Dichloroethene	16 U	6.4 U	0.4 J	0.3 U	4.1	1.4
1,2-Dichlorobenzene	16 U	6.4 U	0.32 U	0.2 U	0.32 U	0.32 U
1,2-Dichloroethane	14 U	5.6 U	0.28 U	0.2 U	0.28 U	0.28 U
1,2-Dichloropropane	18 U	7 U	0.35 U	0.4 U	0.35 U	0.35 U
1,3-Dichlorobenzene	18 U	7 U	0.35 U	0.2 U	0.35 U	0.35 U
1,4-Dichlorobenzene	18 U	7.4 U	0.37 U	0.2 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---
2-Butanone	190 U	76 U	3.8 U	7 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	0.3 U	---	---
2-Hexanone	120 U	52 U	2.5 U	0.7 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	120 U	50 U	2.5 U	0.2 U	2.5 U	2.5 U
Acetone	220 U	90 U	16	3 U	4.5 U	9.4 J
Benzene	14 U	5.6 U	0.28 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	15 U	6 U	0.3 U	0.1 U	0.3 U	0.3 U
Bromoform	12 U	6.4 U	0.25 U	0.4 U	0.32 U	0.25 U
Bromomethane	10 U	6.8 U	0.2 U	0.5 U	0.34 U	0.2 U
Carbon disulfide	16 U	9.6 U	0.33 U	0.2 U	0.48 U	0.33 U
Carbon tetrachloride	14 U	5.6 U	0.28 U	0.3 U	0.28 U	0.28 U
Chlorobenzene	18 U	7.2 U	0.36 U	0.1 U	0.36 U	0.36 U
Chloroethane	16 U	6.6 U	0.33 U	0.3 U	0.33 U	0.33 U
Chloroform	16 U	6.6 U	0.33 U	0.2 U	0.33 U	0.33 U
Chloromethane	7 U	6 U	0.14 U	0.4 U	0.3 U	0.29 J
cis-1,2-Dichloroethene	36 J	8.8 J	0.65 J	0.2 U	7.2	0.32 U
cis-1,3-Dichloropropene	11 U	4.4 U	0.22 U	0.2 U	0.22 U	0.22 U
Dibromochloromethane	14 U	5.6 U	0.28 U	0.2 U	0.28 U	0.28 U
Ethylbenzene	12 U	5 U	0.25 U	0.2 U	0.25 U	0.25 U
m,p-Xylenes	19 U	10 U	0.38 U	0.3 U	0.52 U	0.38 U
Methylene chloride	16 U	9.6 U	0.33 U	3 U	0.48 U	0.33 U
o-Xylene	12 U	4.8 U	0.24 U	0.2 U	0.24 U	0.24 U
Tetrachloroethene	16 U	6.4 U	0.32 U	0.2 U	0.32 U	0.32 U
Toluene	24 U	7.2 U	0.49 U	0.2 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	14 U	5.4 U	0.27 U	0.2 U	0.44 J	0.27 U
trans-1,3-Dichloropropene	12 U	4.8 U	0.24 U	0.2 U	0.24 U	0.24 U
Trichloroethene	820	180	79	63	110	0.48 J
Trichlorofluoromethane	17 U	6.8 U	0.34 U	0.1 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	3900	3300	1.2 U	0.2 U	16	1.2 U
Vinyl chloride	9.5 U	5.2 U	0.19 U	0.2 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	ES-32	HAR-03	HAR-04	HAR-11	HAR-11	HAR-14
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	05/16/03	02/13/03	05/14/03	02/27/03	08/25/03	04/15/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 J	0.3 U	0.3 U	1.1 J
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.59 J	0.32 U	0.32 U	0.32 U	0.32 U	8.4
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	160
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 UJ
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 UJ
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.7 J,L	25	4.9 J,L	5.6 J	8.2 U	4.5 UJ
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.25 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.7 J
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	2.6
Chloromethane	0.14 U	0.17 J	0.14 U	0.14 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	8.3	0.32 U	0.32 U	11	5.6	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.38 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.49 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.45 J	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	40	3	27	0.26 U	0.26 U	4.6
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	150	1.2 U	1.2 U	1.2 U	1.2 U	---
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.39 J	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	HAR-14	HAR-14	HAR-15	HAR-15	HAR-15	HAR-27
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	04/15/03	12/03/03	04/15/03	12/03/03	12/03/03	02/13/03
Sample Type	Split	Primary	Primary	Primary	Dup	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	---	1.1	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	---	0.24 U	0.29 U	0.24 U	0.24 U	0.29 U
1,1,2-Trichloroethane	---	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	---	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	---	9.6	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	---	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	---	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	---	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	---	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	---	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	94	---	2.54 C	---	---	---
2-Butanone	---	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	---	2.6 U	2.5 U	2.6 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	---	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	---	4.5 U	4.8 U	4.5 U	4.6 J	11 U
Benzene	---	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	---	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	---	0.32 U	0.25 U	0.32 U	0.32 U	0.25 U
Bromomethane	---	0.34 U	0.2 U	0.34 U	0.34 U	0.2 U
Carbon disulfide	---	0.48 U	0.33 U	0.48 U	0.48 U	0.33 U
Carbon tetrachloride	---	2.2	0.28 UJ	0.28 U	0.28 U	0.28 U
Chlorobenzene	---	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	---	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	---	2.5	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	---	0.3 U	0.14 U	0.3 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	---	0.32 U	0.32 U	0.32 U	0.32 U	4.9
cis-1,3-Dichloropropene	---	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	---	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	---	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	---	0.52 U	0.38 U	0.52 U	0.52 U	0.38 U
Methylene chloride	---	0.48 U	0.33 U	0.48 U	0.48 U	0.33 U
o-Xylene	---	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	---	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	---	0.36 U	0.49 U	0.36 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	---	0.27 U	0.27 U	0.27 U	0.27 U	3.5
trans-1,3-Dichloropropene	---	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	---	4.4	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	---	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	---	11	---	1.2 U	1.2 U	1.2 U
Vinyl chloride	---	0.26 U	0.19 U	0.26 U	0.26 U	1.6
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

TABLE III
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN SHALLOW WELLS AND THE ECL FRENCH-DRAIN, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	HAR-27
FLUTe Sample Port	---
Sample Date	12/09/03
Sample Type	Primary
Sample Qualifier	---
Compound (ug/l)	
1,1,1-Trichloroethane	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U
1,1,2-Trichloroethane	0.3 U
1,1-Dichloroethane	0.27 U
1,1-Dichloroethene	0.32 U
1,2-Dichlorobenzene	0.32 U
1,2-Dichloroethane	0.28 U
1,2-Dichloropropane	0.35 U
1,3-Dichlorobenzene	0.35 U
1,4-Dichlorobenzene	0.37 U
1,4-Dioxane	---
2-Butanone	3.8 U
2-Chloroethyl Vinyl Ether	---
2-Hexanone	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U
Acetone	4.5 U
Benzene	0.28 U
Bromodichloromethane	0.3 U
Bromoform	0.32 U
Bromomethane	0.34 U
Carbon disulfide	0.48 U
Carbon tetrachloride	0.28 U
Chlorobenzene	0.36 U
Chloroethane	0.33 U
Chloroform	0.33 U
Chloromethane	0.3 U
cis-1,2-Dichloroethene	21
cis-1,3-Dichloropropene	0.22 U
Dibromochloromethane	0.28 U
Ethylbenzene	0.25 U
m,p-Xylenes	0.52 U
Methylene chloride	0.48 U
o-Xylene	0.24 U
Tetrachloroethene	0.32 U
Toluene	0.36 U
trans-1,2-Dichloroethene	14
trans-1,3-Dichloropropene	0.24 U
Trichloroethene	0.26 U
Trichlorofluoromethane	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U
Vinyl chloride	6.4
Analytical Method	8260B
Laboratory	DMA

Haley & Aldrich, Inc.

See last page of Table III for footnotes and explanations.

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27-February-2004

TABLE III
FOOTNOTES AND EXPLANATIONS

AMA	=	American Analytics of Chatsworth, California.
DMA	=	Del Mar Analytical of Irvine, California.
(---)	=	Analysis not performed.
Primary	=	Primary sample.
Dup	=	Sample duplicate.
Split	=	Sample split.
ug/l	=	Micrograms per liter.
C	=	Possible carry-over contaminant.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
pH	=	pH of preserved sample did not meet the method preservation requirements.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range (see Appendix D for details).
L	=	Laboratory Contaminant.

Notes:

Low-level 1,4-dioxane analyses were performed on primary samples by Ceimic Corporation and on split samples by Del Mar Analytical using modified EPA method 8260 SIM.

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-01	RD-02	RD-02	RD-02	RD-02	RD-02	RD-02
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/07/03	02/04/03	05/05/03	08/11/03	08/11/03	11/19/03	11/19/03
Sample Type	Primary	Primary	Primary	Primary	Dup	Primary	Dup
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	3 U	0.6 U	1.5 U	3 U	---	0.3 U	1.5 U
1,1,2,2-Tetrachloroethane	2.9 U	0.58 U	1.4 U	2.4 U	---	0.24 U	1.2 U
1,1,2-Trichloroethane	3 U	0.6 U	1.5 U	3 U	---	0.3 U	1.5 U
1,1-Dichloroethane	2.7 U	0.54 U	1.4 U	2.7 U	---	0.27 U	1.4 U
1,1-Dichloroethene	3.2 U	1.4 J	1.6 U	3.2 U	---	1.5	1.8 J
1,2-Dichlorobenzene	3.2 U	0.64 U	1.6 U	3.2 U	---	0.32 U	1.6 U
1,2-Dichloroethane	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U
1,2-Dichloropropane	3.5 U	0.7 U	1.8 U	3.5 U	---	0.35 U	1.8 U
1,3-Dichlorobenzene	3.5 U	0.7 U	1.8 U	3.5 U	---	0.35 U	1.8 U
1,4-Dichlorobenzene	3.7 U	0.74 U	1.8 U	3.7 U	---	0.37 U	1.8 U
1,4-Dioxane	2.67	1.82 J	2.32	1.52	1.64	1.8 U	---
2-Butanone	38 U	7.6 U	19 U	38 U	---	3.8 U	19 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	25 U	5 U	12 U	26 U	---	2.6 U	13 U
4-Methyl-2-pentanone (MIBK)	25 U	5 U	12 U	25 U	---	2.5 U	12 U
Acetone	45 U	9 U	22 U	45 U	---	4.5 U	22 U
Benzene	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U
Bromodichloromethane	3 U	0.6 U	1.5 U	3 U	---	0.3 U	1.5 U
Bromoform	2.5 U	0.5 U	1.2 U	3.2 U	---	0.32 U	1.6 U
Bromomethane	2 U	0.4 U	1 U	9.9 U	---	0.34 U	1.7 U
Carbon disulfide	3.3 U	0.66 U	1.6 U	4.8 U	---	0.48 U	2.4 U
Carbon tetrachloride	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U
Chlorobenzene	3.6 U	0.72 U	1.8 U	3.6 U	---	0.36 U	1.8 U
Chloroethane	3.3 U	0.66 U	1.6 U	9.1 U	---	0.33 U	1.6 U
Chloroform	3.3 U	0.66 U	1.6 U	3.3 U	---	0.33 U	1.6 U
Chloromethane	1.4 U	0.28 U	0.7 U	2.7 U	---	0.3 U	1.5 U
cis-1,2-Dichloroethene	690	360	390	490	---	440	450
cis-1,3-Dichloropropene	2.2 U	0.44 U	1.1 U	2.2 U	---	0.22 U	1.1 U
Dibromochloromethane	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U
Ethylbenzene	2.5 U	0.5 U	1.2 U	2.5 U	---	0.25 U	1.2 U
m,p-Xylenes	3.8 U	0.76 U	1.9 U	5.2 U	---	0.52 U	2.6 U
Methylene chloride	5.7 J	0.66 U	1.6 U	7.6 J,L	---	0.48 U	2.4 U
o-Xylene	2.4 U	0.48 U	1.2 U	2.4 U	---	0.24 U	1.2 U
Tetrachloroethene	3.2 U	0.64 U	1.6 U	3.2 U	---	0.32 U	1.6 U
Toluene	4.9 U	0.98 U	2.4 U	3.6 U	---	0.36 U	1.8 U
trans-1,2-Dichloroethene	23	27	24	28	---	25	26
trans-1,3-Dichloropropene	2.4 U	0.48 U	1.2 U	2.4 U	---	0.24 U	1.2 U
Trichloroethene	970	330	330	350	---	280	290
Trichlorofluoromethane	3.4 U	0.68 U	1.7 U	3.4 U	---	0.34 U	1.7 U
Trichlorotrifluoroethane (Freon 113)	12 U	2.4 U	6 U	12 U	---	1.2 U	6 U
Vinyl chloride	6	10	7.5	6.5	---	7.2	6.9
Analytical Method	8260B	8260B	8260B	8260B	8260 SIM	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	Ceimic	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-03	RD-03	RD-03	RD-04	RD-04	RD-04	RD-04
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/18/03	02/18/03	08/15/03	02/03/03	05/07/03	05/07/03	08/20/03
Sample Type	Primary	Dup	Primary	Primary	Primary	Split	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	---	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.29 U	0.29 U	---	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	---	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	---	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	---	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	---	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	---	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	---	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	---	0.37 U
1,4-Dioxane	---	---	---	0.265 U	0.331 U	0.45 U	0.249 U
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	---	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	---	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	---	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	---	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	---	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.25 U	0.25 U	---	0.32 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	---	0.34 U
Carbon disulfide	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U	---	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	---	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	---	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	---	0.33 U
Chloromethane	0.14 U	0.14 U	0.3 U	0.14 U	0.14 U	---	0.3 U
cis-1,2-Dichloroethene	1	1.1	2	13	13	---	14
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	---	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	---	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.38 U	0.38 U	---	0.52 U
Methylene chloride	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U	---	0.48 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	---	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	---	0.32 U
Toluene	0.49 U	0.49 U	0.36 U	0.49 U	0.49 U	---	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.4 J	0.32 J	0.28 J	---	0.41 J
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	---	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	62	60	---	71
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	---	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	---	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.19 U	0.19 U	---	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260SIM	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-04	RD-05A	RD-05A	RD-05B	RD-05B	RD-05B	RD-05B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	11/20/03	01/31/03	08/07/03	01/31/03	05/09/03	05/09/03	08/08/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Dup	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.29 U	0.24 U	0.29 U	0.29 U	0.29 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	0.07 U	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 J,L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.25 U	0.32 U	0.25 U	0.25 U	0.25 U	0.32 U
Bromomethane	0.34 U	0.2 U	0.99 U	0.2 U	0.2 U	0.2 U	0.99 U
Carbon disulfide	0.48 U	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.91 U	0.33 U	0.33 U	0.33 U	0.91 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.14 U	0.27 U	0.14 U	0.14 U	0.14 U	0.27 U
cis-1,2-Dichloroethene	14	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.38 U	0.52 U	0.38 U	0.38 U	0.38 U	0.52 U
Methylene chloride	2.8 J,L	6 U	0.48 U	5.1 U	0.33 U	0.33 U	1.1 J,L
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.49 U	0.36 U	0.49 U	0.49 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	0.33 J	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	79	0.26 U	0.26 U	0.26 U	0.48 J	0.6 J	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.19 U	0.26 U	0.19 U	0.19 U	0.19 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-05B	RD-05B	RD-05B	RD-05C	RD-05C	RD-05C	RD-05C
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	11/10/03	11/10/03	11/10/03	01/31/03	05/09/03	08/08/03	11/11/03
Sample Type	Primary	Dup	Split	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.4 U	0.29 U	0.29 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	7 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	0.3 U	---	---	---	---
2-Hexanone	2.6 U	2.6 U	0.7 U	2.5 U	2.5 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	3 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.32 U	0.4 U	0.25 U	0.25 U	0.32 U	0.32 U
Bromomethane	0.34 U	0.34 U	0.5 U	0.2 U	0.2 U	0.99 U	0.34 U
Carbon disulfide	0.48 U	0.48 U	0.2 U	0.34 U	0.33 U	0.48 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U	0.91 U	0.33 U
Chloroform	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.3 U	0.4 U	0.14 U	0.14 U	0.27 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.52 U	0.3 U	0.38 U	0.38 U	0.52 U	0.52 U
Methylene chloride	0.48 U	0.48 U	3 U	6.9 U	0.33 U	0.48 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.2 U	0.49 U	0.49 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.2 U	0.26 U	0.45 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.26 U	0.2 U	0.19 U	0.19 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	AMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-06	RD-06	RD-06	RD-07	RD-07	RD-09	RD-10
FLUTe Sample Port	---	---	---	Z3	Z13	---	Comp
Sample Date	02/18/03	05/09/03	08/20/03	01/29/03	08/28/03	02/26/03	01/28/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.29 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	0.448 J
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	5.8 J	4.5 U	12	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.67 J,F	0.54 F	0.36 J	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.25 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.2 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.3 U	0.14 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	1.2	28	15	13
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.38 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.36 U	0.49 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.4 J	8.6	4.9	0.46 J
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	8.4	1.6	55	6.6
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.19 U	0.26 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-10	RD-13	RD-13	RD-13	RD-13	RD-13	RD-14
FLUTE Sample Port	Comp	---	---	---	---	---	---
Sample Date	04/30/03	02/07/03	02/07/03	05/13/03	11/12/03	11/12/03	02/26/03
Sample Type	Primary	Primary	Dup	Primary	Primary	Split	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.29 U	0.24 U	0.4 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.3 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.4 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.2 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.2 U	0.37 U
1,4-Dioxane	0.07 U	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	0.3 U	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.5 U	2.6 U	0.7 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.2 U	2.5 U
Acetone	9.4 J,F	4.5 U	4.5 U	7.5 J,L	4.5 U	3 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.1 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.1 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.25 U	0.32 U	0.4 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.5 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U	0.2 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U	0.28 U
Chlorobenzene	0.39 J,F	0.36 U	0.36 U	0.36 U	0.36 U	0.1 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.3 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.3 U	0.4 U	0.14 U
cis-1,2-Dichloroethene	12	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.2 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.38 U	0.52 U	0.3 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U	3 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.49 U	1.7	1.3	0.49 U
trans-1,2-Dichloroethene	0.47 J,F	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U
Trichloroethene	4.9	1.4	1.3	0.26 U	0.66 J	0.2 U	4.3
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.1 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.19 U	0.26 U	0.2 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	AMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-15	RD-16	RD-16	RD-16	RD-16	RD-16	RD-17
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/26/03	02/26/03	05/13/03	05/13/03	08/15/03	11/10/03	02/24/03
Sample Type	Primary	Primary	Primary	Split	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	pH
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.4 U	0.24 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	7 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	0.3 U	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	0.7 U	2.6 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	3 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.4 U	0.32 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.5 U	0.34 U	0.34 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.2 U	0.48 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.29 J	0.14 U	0.4 U	0.3 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.3 U	0.52 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	3 U	0.48 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.2 U	0.36 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.2 U	0.26 U	0.26 U	1.6
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.2 U	0.26 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	AMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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27-February-2004

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-18	RD-18	RD-18	RD-18	RD-19	RD-19	RD-19
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	02/17/03	05/13/03	08/14/03	11/19/03	02/26/03	05/06/03	05/06/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Dup
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.24 U	0.29 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.6 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	8.8 J,L	5.8 J,L	4.5 U	4.5 U	4.5 U	4.8 U	5.7 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.32 U	0.25 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.34 U	0.2 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 J	0.28 J	0.3 U	0.3 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.52 U	0.38 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.36 U	0.36 U	0.49 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.26 U	0.19 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-19	RD-19	RD-20	RD-21	RD-21	RD-21	RD-21
FLUTe Sample Port	---	---	---	Z2	Z2	Z2	Z2
Sample Date	08/14/03	12/10/03	02/14/03	02/25/03	08/28/03	11/17/03	11/17/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Dup
Sample Qualifier	---	---	---	pH	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.29 U	0.29 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.33 J	0.32 J	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.5 U	2.5 U	2.6 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.63 F	0.69 F	0.28 J,F	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.32 U	0.25 U	0.25 U	0.32 U	0.32 U	0.32 U
Bromomethane	0.34 U	0.34 U	0.2 U	0.2 U	0.34 U	0.34 U	0.34 U
Carbon disulfide	0.48 U	0.48 U	4.9 J	0.33 U	0.48 U	0.82 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	7.4	8.3	7.3	8.1
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	5.5	7.3	3.2	3
Chloromethane	0.3 U	0.3 U	0.15 J	0.14 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.63 J	190	170	150
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.52 U	0.38 U	0.38 U	0.52 U	0.52 U	0.52 U
Methylene chloride	0.48 U	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.49 U	8.4 F	8.3 F	5 F	4.4 F
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.85 J	4.4	0.93 J
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	67	84	69	70
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.26 U	0.19 U	0.19 U	0.26 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-21	RD-22	RD-22	RD-22	RD-22	RD-22	RD-22
FLUTe Sample Port	Z2	Z2	Z2	Z2	Z2	Z2	Z2
Sample Date	11/17/03	02/24/03	02/24/03	04/30/03	04/30/03	08/27/03	11/17/03
Sample Type	Split	Primary	Split	Primary	Dup	Primary	Primary
Sample Qualifier	---	pH	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.2 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.4 U	0.29 U	0.4 U	0.29 U	0.29 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.2 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.2 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.3 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.2 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.2 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.4 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.2 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.2 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	7 U	3.8 U	7 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	0.3 U	---	0.3 U	---	---	---	---
2-Hexanone	0.7 U	2.5 U	0.7 U	2.5 U	2.5 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	0.2 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	3 U	13 F	3 U	8.7 J,F	16 F	4.5 U	4.5 U
Benzene	0.1 U	0.46 J,F	0.1 U	0.56 F	0.9 F	0.45 J,F	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.4 U	0.25 U	0.4 U	0.25 U	0.25 U	0.32 U	0.32 U
Bromomethane	0.5 U	0.2 U	0.5 U	0.2 U	0.2 U	0.34 U	0.34 U
Carbon disulfide	0.2 U	0.33 U	0.2 U	0.33 U	0.33 U	0.48 U	0.48 U
Carbon tetrachloride	6	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.1 U	0.36 U	0.1 U	0.36 U	0.42 J,F	0.36 U	0.36 U
Chloroethane	0.3 U	0.33 U	0.3 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	2.4	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.14 U	0.4 U	0.14 U	0.14 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	180	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.2 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.2 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.2 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.3 U	0.38 U	0.3 U	0.38 U	0.38 U	0.52 U	0.52 U
Methylene chloride	3 U	0.33 U	3 U	0.33 U	0.33 U	0.48 U	0.48 U
o-Xylene	0.2 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.2 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	3.8 F	1.4 F	0.2 U	1.9 F	0.9 J,F	0.93 J,F	0.63 J,F
trans-1,2-Dichloroethene	0.2 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.2 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	59	0.26 U	0.2 U	0.26 U	0.26 U	0.26 U	1.3 U
Trichlorofluoromethane	0.1 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	0.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.2 U	0.19 U	0.2 U	0.19 U	0.19 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	AMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-23	RD-23	RD-24	RD-24	RD-25	RD-25	RD-26
FLUTe Sample Port	Z1	Z1	---	---	---	---	---
Sample Date	02/26/03	08/26/03	02/12/03	11/14/03	02/24/03	11/13/03	05/15/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	pH	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.29 U	0.24 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.5 J	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	2	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.65	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	15 F	4.5 U	4.5 U	4.5 U	4.5 U	5.7 J,L	4.5 U
Benzene	0.91 F	0.6 L	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.25 U	0.32 U	0.25 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.34 U	0.2 U	0.34 U	0.2 U	0.34 U	0.2 U
Carbon disulfide	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	0.14 U	0.3 U	0.14 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	8	16	0.32 U	0.32 U	0.34 J	1.1	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.38 U	0.52 U	0.38 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.56 J	0.44 J	6.2	27	0.32 U
Toluene	1.5 F	9 F	0.49 U	0.36 U	0.49 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	37	48	0.26 U	0.26 U	0.8 J	1.1	3.4
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.19 U	0.26 U	0.19 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-26	RD-26	RD-27	RD-27	RD-28	RD-28	RD-29
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	08/21/03	08/21/03	02/21/03	11/14/03	02/24/03	11/14/03	05/13/03
Sample Type	Primary	Dup	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	pH	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.29 U	0.24 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	7.3 U	5.6 U	4.5 U	4.5 U	4.5 U	4.5 U	8.2 J,L
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.32 U	0.25 U	0.32 U	0.25 U	0.32 U	0.25 U
Bromomethane	0.34 U	0.34 U	0.2 U	0.34 U	0.2 U	0.34 U	0.2 U
Carbon disulfide	0.48 U	0.48 U	0.33 U	0.48 U	0.33 U	0.48 U	1.8 J
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.36 J,S	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.3 U	0.14 U	0.3 U	0.14 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.52 U	0.38 U	0.52 U	0.38 U	0.52 U	0.38 U
Methylene chloride	0.48 U	0.48 U	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.49 U	0.36 U	0.49 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	5.9	6	0.26 U	0.26 U	0.26 U	0.26 U	1.4
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.26 U	0.19 U	0.26 U	0.19 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-30	RD-30	RD-31	RD-32	RD-32	RD-33A	RD-33A
FLUTe Sample Port	---	---	Z7	---	---	Z4	Z4
Sample Date	02/07/03	11/14/03	01/27/03	02/21/03	05/13/03	01/30/03	01/30/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Dup
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	5.7 J,L	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.3 J,F	0.28 U	0.28 U	1 F	1 F
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.76 J	0.55 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U	3 U	12 L
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	0.49 U	0.49 U	0.49 U	35 F	31 F
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	7.1	8.2	0.59 J	0.26 U	0.26 U	0.66 J	0.53 J
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-33A	RD-33B	RD-33B	RD-33B	RD-33C	RD-33C	RD-33C
FLUTe Sample Port	Z2	---	---	---	---	---	---
Sample Date	08/27/03	02/11/03	05/14/03	11/13/03	02/10/03	05/13/03	11/13/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.81 J	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.29 U	0.29 U	0.24 U	0.29 U	0.29 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	7.2 U	8.3 J,L	6.5 J,L	4.5 U	4.5 U	8.6 J,L	4.5 U
Benzene	0.63 F	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.25 U	0.25 U	0.32 U	0.25 U	0.25 U	0.32 U
Bromomethane	0.34 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U	0.34 U
Carbon disulfide	0.48 U	0.33 U	0.33 U	1 J,S	0.33 U	0.33 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.14 U	0.14 U	0.3 U	0.14 U	0.14 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.38 U	0.38 U	0.52 U	0.38 U	0.38 U	0.52 U
Methylene chloride	0.48 U	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	2.6 U	0.49 U	0.49 U	0.36 U	0.49 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.19 U	0.19 U	0.26 U	0.19 U	0.19 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-34A	RD-34B	RD-34B	RD-34C	RD-34C	RD-34C	RD-35A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/16/03	02/06/03	11/13/03	02/06/03	11/13/03	11/13/03	02/14/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Dup	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	1.9
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.29 U	0.24 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.41 J
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	33
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.5 U	2.6 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	6.6 J	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	5 J,L	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.25 U	0.32 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.2 U	0.34 U	0.34 U	0.2 U
Carbon disulfide	0.59 J	0.33 U	0.48 U	0.33 U	0.48 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 J
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.56 J
Chloromethane	0.14 U	0.14 U	0.3 U	0.14 U	0.3 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.89 J	0.32 U	0.32 U	0.32 U	0.32 U	5.2
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.38 U	0.52 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.48 U	0.33 U	0.48 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	9.6
Toluene	0.49 U	0.49 U	0.36 U	0.49 U	0.36 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	1.4	1.6	0.58 J	0.26 U	0.26 U	0.26 U	840
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	260
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.19 U	0.26 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-35B	RD-36B	RD-36C	RD-36D	RD-37	RD-37	RD-37
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/19/03	02/12/03	02/13/03	02/13/03	02/14/03	02/17/03	02/17/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Split
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	7.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1,2,2-Tetrachloroethane	7.2 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.4 U
1,1,2-Trichloroethane	7.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1-Dichloroethane	11 J	0.27 U	0.73 J	0.27 U	0.27 U	0.27 U	0.2 U
1,1-Dichloroethene	240	0.32 U	3.7	0.32 U	0.32 U	0.32 U	0.3 U
1,2-Dichlorobenzene	8 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
1,2-Dichloroethane	7 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
1,2-Dichloropropane	8.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.4 U
1,3-Dichlorobenzene	8.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.2 U
1,4-Dichlorobenzene	9.2 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.2 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	95 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	0.3 U
2-Hexanone	62 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.7 U
4-Methyl-2-pentanone (MIBK)	62 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.2 U
Acetone	110 U	4.5 U	6.9 U	4.5 U	4.5 J,L	11 U	28
Benzene	7 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	7.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	6.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.4 U
Bromomethane	5 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.5 U
Carbon disulfide	8.2 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U
Carbon tetrachloride	7 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U
Chlorobenzene	9 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	8.2 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.3 U
Chloroform	8.2 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U
Chloromethane	3.5 U	0.14 U	0.14 U	0.14 U	0.14 U	0.29 U	0.4 U
cis-1,2-Dichloroethene	1100	0.32 U	61	0.32 U	0.32 U	0.32 U	0.2 U
cis-1,3-Dichloropropene	5.5 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.2 U
Dibromochloromethane	7 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
Ethylbenzene	6.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U
m,p-Xylenes	9.5 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U	0.3 U
Methylene chloride	8.2 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	3 U
o-Xylene	6 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Tetrachloroethene	8 U	2.9	3	0.32 U	0.32 U	0.32 U	0.2 U
Toluene	12 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.2 U
trans-1,2-Dichloroethene	6.8 U	0.27 U	0.35 J	0.27 U	0.27 U	0.27 U	0.2 U
trans-1,3-Dichloropropene	6 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Trichloroethene	2100	64	77	0.69 J	0.26 U	0.26 U	0.2 U
Trichlorofluoromethane	8.5 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.1 U
Trichlorotrifluoroethane (Freon 113)	30 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.2 U
Vinyl chloride	4.8 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	0.2 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-37	RD-38A	RD-38B	RD-38B	RD-39B	RD-39B	RD-40
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/06/03	02/13/03	02/13/03	05/02/03	02/13/03	05/01/03	05/08/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	1.4 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	6.2	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	19	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	1.4 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	1.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	1.8 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	1.8 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	19 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	12 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.7 J,L	22 U	4.5 U	4.5 U	4.5 U	4.5 U	8.4 J,L
Benzene	0.28 U	1.4 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	1.5 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	1.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
Bromomethane	0.2 U	1 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	1.6 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	1.4 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	1.8 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	1.6 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	1.6 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.7 U	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	33	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	1.1 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	1.4 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	1.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	1.9 U	0.38 U	0.38 U	0.38 U	0.38 U	0.38 U
Methylene chloride	0.33 U	1.6 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
o-Xylene	0.24 U	1.2 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	1.6 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	2.4 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	1.4 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	1.2 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	690	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	1.7 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	6 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.95 U	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-40	RD-41A	RD-41B	RD-41C	RD-41C	RD-42	RD-43A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/08/03	02/06/03	02/06/03	02/06/03	02/06/03	02/07/03	02/17/03
Sample Type	Dup	Primary	Primary	Primary	Split	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	3 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	2.9 U	0.29 U	0.4 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	3 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	2.7 U	0.27 U	0.2 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	3.2 U	0.32 U	0.3 U	1	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	3.2 U	0.32 U	0.2 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	2.8 U	0.28 U	0.2 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	3.5 U	0.35 U	0.4 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	3.5 U	0.35 U	0.2 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	3.7 U	0.37 U	0.2 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	38 U	3.8 U	7 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	0.3 U	---	---
2-Hexanone	2.5 U	2.5 U	25 U	2.5 U	0.7 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	25 U	2.5 U	0.2 U	2.5 U	2.5 U
Acetone	6.6 J,L	4.5 U	45 U	4.5 U	3 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	2.8 U	0.28 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	3 U	0.3 U	0.1 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	2.5 U	0.25 U	0.4 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	2 U	0.2 U	0.5 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	3.3 U	0.33 U	0.2 U	0.6 J	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	2.8 U	0.28 U	0.3 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	3.6 U	0.36 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	3.3 U	0.33 U	0.3 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	3.3 U	0.33 U	0.2 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	1.4 U	0.14 U	0.4 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	2.5	570	0.32 U	0.2 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	2.2 U	0.22 U	0.2 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	2.8 U	0.28 U	0.2 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	2.5 U	0.25 U	0.2 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	3.8 U	0.38 U	0.3 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	3.3 U	0.33 U	3 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	2.4 U	0.24 U	0.2 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	3.2 U	0.32 U	0.2 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	4.9 U	0.49 U	0.2 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.37 J	32	0.27 U	0.2 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	2.4 U	0.24 U	0.2 U	0.24 U	0.24 U
Trichloroethene	0.26 U	3.5	1400	0.26 U	0.2 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	3.4 U	0.34 U	0.1 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	12 U	1.2 U	0.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	25	0.19 U	0.2 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	AMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-43A	RD-43B	RD-43B	RD-43B	RD-43B	RD-43C	RD-43C
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/02/03	02/11/03	05/01/03	08/13/03	08/13/03	02/17/03	05/02/03
Sample Type	Primary	Primary	Primary	Primary	Dup	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.24 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.6 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	6.2 J,L	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.32 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.34 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.3 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.52 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.36 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.26 U	0.26 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-43C	RD-44	RD-44	RD-44	RD-44	RD-45B	RD-45C
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	08/13/03	02/04/03	02/04/03	05/06/03	08/11/03	02/05/03	02/07/03
Sample Type	Primary	Primary	Dup	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	---	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.29 U	---	0.29 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	---	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	---	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	---	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	---	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	---	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	---	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	---	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	0.07 U	0.07 U	0.147 U	0.07 U	---	---
2-Butanone	3.8 U	3.8 U	---	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.5 U	---	2.5 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	---	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	---	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	---	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.25 U	---	0.25 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.34 U	0.2 U	---	0.2 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.48 U	0.33 U	---	0.33 U	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	---	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	---	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	---	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.14 U	---	0.14 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	---	0.32 U	0.32 U	19	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	---	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	---	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.38 U	---	0.38 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.48 U	0.33 U	---	0.33 U	0.48 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	---	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	---	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.49 U	---	0.49 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	---	0.27 U	0.27 U	2.1	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	---	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	---	0.26 U	0.26 U	1.7	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	---	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	---	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.19 U	---	0.19 U	0.26 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260SIM	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	Ceimic	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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27-February-2004

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-46A	RD-46A	RD-46B	RD-46B	RD-47	RD-48B	RD-48B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/18/03	08/13/03	02/18/03	08/13/03	02/06/03	02/18/03	02/18/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Dup
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	29 U	0.24 U	0.29 U	0.24 U	0.29 U	0.29 U	0.29 U
1,1,2-Trichloroethane	30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	32 U	1.1	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	380 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	250 U	2.6 U	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	250 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	450 U	4.5 U	10	4.5 U	4.5 U	5.7 J,L	5.3 J,L
Benzene	28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	30 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	25 U	0.32 U	0.25 U	0.32 U	0.25 U	0.25 U	0.25 U
Bromomethane	20 U	0.34 U	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U
Carbon disulfide	33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U
Carbon tetrachloride	28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	33 U	0.47 J,S	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	14 U	0.3 U	0.14 U	0.3 U	0.14 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	110	380	0.32 U	0.32 U	1.1	0.32 U	0.32 U
cis-1,3-Dichloropropene	22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	38 U	0.52 U	0.38 U	0.52 U	0.38 U	0.38 U	0.38 U
Methylene chloride	33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U
o-Xylene	24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	49 U	0.36 U	0.49 U	0.36 U	0.49 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	27 U	12	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	11000	3000	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	120 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	19 U	0.26 U	0.19 U	0.26 U	0.19 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-48B	RD-48B	RD-48B	RD-48B	RD-48B	RD-48B	RD-48C
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/18/03	05/15/03	09/03/03	09/03/03	09/03/03	11/20/03	02/18/03
Sample Type	Split	Primary	Primary	Dup	Split	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.4 U	0.29 U	0.24 U	0.24 U	0.4 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.2 U	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U
1,1-Dichloroethane	0.2 U	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U
1,1-Dichloroethene	0.3 U	0.32 U	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.2 U	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U
1,2-Dichloroethane	0.2 U	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U
1,2-Dichloropropane	0.4 U	0.35 U	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.2 U	0.35 U	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.2 U	0.37 U	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	7 U	3.8 U	3.8 U	3.8 U	7 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	0.3 U	---	---	---	0.3 U	---	---
2-Hexanone	0.7 U	2.5 U	2.6 U	2.6 U	0.7 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	0.2 U	2.5 U	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U
Acetone	3 U	11 S	4.5 U	4.5 U	3 U	7.2 J,L	4.5 U
Benzene	0.1 U	0.28 U	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U
Bromoform	0.4 U	0.25 U	0.32 U	0.32 U	0.4 U	0.32 U	0.25 U
Bromomethane	0.5 U	0.2 U	0.34 U	0.34 U	0.5 U	0.34 U	0.2 U
Carbon disulfide	0.2 U	0.33 U	0.48 U	0.48 U	0.2 U	0.48 U	0.33 U
Carbon tetrachloride	0.3 U	0.28 U	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.3 U	0.33 U	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U
Chloroform	0.2 U	0.33 U	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.14 U	0.3 U	0.3 U	0.4 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	0.2 U	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.2 U	0.22 U	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U
Dibromochloromethane	0.2 U	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U
Ethylbenzene	0.2 U	0.25 U	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U
m,p-Xylenes	0.3 U	0.38 U	0.52 U	0.52 U	0.3 U	0.52 U	0.38 U
Methylene chloride	3 U	0.33 U	0.48 U	0.48 U	3 U	3.4 J,L	0.34 U
o-Xylene	0.2 U	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U
Tetrachloroethene	0.2 U	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U
Toluene	0.2 U	0.49 U	0.36 U	0.36 U	0.2 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.2 U	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.2 U	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U
Trichloroethene	0.2 U	0.26 U	0.26 U	0.26 U	0.2 U	0.26 U	0.26 U
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	0.2 U	1.2 U	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U
Vinyl chloride	0.2 U	0.19 U	0.26 U	0.26 U	0.2 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	AMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-48C	RD-48C	RD-48C	RD-49A	RD-49A	RD-49A	RD-49A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/13/03	08/20/03	11/21/03	02/04/03	02/04/03	05/07/03	05/07/03
Sample Type	Primary	Primary	Primary	Primary	Dup	Primary	Split
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	12 U	12 U	30 U	---
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.24 U	12 U	12 U	29 U	---
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	12 U	12 U	30 U	---
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	11 U	11 U	27 U	---
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	13 U	13 U	32 U	---
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	13 U	13 U	32 U	---
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	11 U	11 U	28 U	---
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	14 U	14 U	35 U	---
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	14 U	14 U	35 U	---
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	15 U	15 U	37 U	---
1,4-Dioxane	---	---	---	0.414 J	---	0.65 J	0.73 U
2-Butanone	3.8 U	3.8 U	3.8 U	150 U	150 U	380 U	---
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	2.6 U	100 U	100 U	250 U	---
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	100 U	100 U	250 U	---
Acetone	4.5 U	5.3 U	4.5 U	180 U	180 U	450 U	---
Benzene	0.28 U	0.28 U	0.32 J,L	11 U	11 U	28 U	---
Bromodichloromethane	0.3 U	0.3 U	0.3 U	12 U	12 U	30 U	---
Bromoform	0.25 U	0.32 U	0.32 U	10 U	10 U	25 U	---
Bromomethane	0.2 U	0.34 U	0.34 U	8 U	8 U	20 U	---
Carbon disulfide	0.33 U	0.48 U	0.48 U	13 U	13 U	33 U	---
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	11 U	11 U	28 U	---
Chlorobenzene	0.36 U	0.36 U	0.36 U	14 U	14 U	36 U	---
Chloroethane	0.33 U	0.33 U	0.33 U	13 U	13 U	33 U	---
Chloroform	0.33 U	0.33 U	0.33 U	13 U	13 U	33 U	---
Chloromethane	0.14 U	0.3 U	0.3 U	5.6 U	5.6 U	14 U	---
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	2000	2200	2100	---
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	8.8 U	8.8 U	22 U	---
Dibromochloromethane	0.28 U	0.28 U	0.28 U	11 U	11 U	28 U	---
Ethylbenzene	0.25 U	0.25 U	0.25 U	10 U	10 U	25 U	---
m,p-Xylenes	0.38 U	0.52 U	0.52 U	15 U	15 U	38 U	---
Methylene chloride	0.33 U	0.48 U	0.48 U	20 J,L	13 J,L	55 J,L	---
o-Xylene	0.24 U	0.24 U	0.24 U	9.6 U	9.6 U	24 U	---
Tetrachloroethene	0.32 U	0.32 U	0.32 U	13 U	13 U	32 U	---
Toluene	0.49 U	0.36 U	0.36 U	20 U	20 U	49 U	---
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	46	51	40 J	---
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	9.6 U	9.6 U	24 U	---
Trichloroethene	0.26 U	0.26 U	0.26 U	4100	4400	4000	---
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	14 U	14 U	34 U	---
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	48 U	48 U	120 U	---
Vinyl chloride	0.19 U	0.26 U	0.26 U	7.6 U	7.6 U	19 U	---
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260SIM
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49A	RD-49A	RD-49B	RD-49B	RD-49B	RD-49B	RD-49B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	08/11/03	11/18/03	02/03/03	05/06/03	05/06/03	08/11/03	11/17/03
Sample Type	Primary	Primary	Primary	Primary	Split	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	12 U	12 U	0.3 U	0.6 U	---	0.6 U	1.2 U
1,1,2,2-Tetrachloroethane	9.6 U	9.6 U	0.29 U	0.58 U	---	0.48 U	0.96 U
1,1,2-Trichloroethane	12 U	12 U	0.3 U	0.6 U	---	0.6 U	1.2 U
1,1-Dichloroethane	11 U	11 U	0.27 U	0.54 U	---	0.54 U	1.1 U
1,1-Dichloroethene	13 U	13 U	0.49 U	0.64 U	---	0.64 U	1.3 U
1,2-Dichlorobenzene	13 U	13 U	0.32 U	0.64 U	---	0.64 U	1.3 U
1,2-Dichloroethane	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U
1,2-Dichloropropane	14 U	14 U	0.35 U	0.7 U	---	0.7 U	1.4 U
1,3-Dichlorobenzene	14 U	14 U	0.35 U	0.7 U	---	0.7 U	1.4 U
1,4-Dichlorobenzene	15 U	15 U	0.37 U	0.74 U	---	0.74 U	1.5 U
1,4-Dioxane	0.07 U	0.68 U	1.5 U	2.76	2.4 U	1.5	2.3
2-Butanone	150 U	150 U	3.8 U	7.6 U	---	7.6 U	15 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	100 U	100 U	2.5 U	5 U	---	5.2 U	10 U
4-Methyl-2-pentanone (MIBK)	100 U	100 U	2.5 U	5 U	---	5 U	10 U
Acetone	180 U	180 U	4.5 U	9 U	---	9 U	18 U
Benzene	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U
Bromodichloromethane	12 U	12 U	0.3 U	0.6 U	---	0.6 U	1.2 U
Bromoform	13 U	13 UJ	0.25 U	0.5 U	---	0.64 U	1.3 U
Bromomethane	14 U	14 U	0.2 U	0.4 U	---	0.68 U	1.4 U
Carbon disulfide	19 U	19 U	0.33 U	0.66 U	---	0.96 U	1.9 U
Carbon tetrachloride	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U
Chlorobenzene	14 U	14 U	0.36 U	0.72 U	---	0.72 U	1.4 U
Chloroethane	13 U	13 U	0.33 U	0.66 U	---	0.66 U	1.3 U
Chloroform	13 U	13 U	0.33 U	0.66 U	---	0.66 U	1.3 U
Chloromethane	12 U	12 U	0.14 U	0.28 U	---	0.6 U	1.2 U
cis-1,2-Dichloroethene	3400	2000 J	180	220	---	280	260
cis-1,3-Dichloropropene	8.8 U	8.8 U	0.22 U	0.44 U	---	0.44 U	0.88 U
Dibromochloromethane	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U
Ethylbenzene	10 U	10 U	0.25 U	0.5 U	---	0.5 U	1 U
m,p-Xylenes	21 U	21 U	0.38 U	0.76 U	---	1 U	2.1 U
Methylene chloride	19 U	19 U	0.33 U	0.66 U	---	0.96 U	1.9 U
o-Xylene	9.6 U	9.6 U	0.24 U	0.48 U	---	0.48 U	0.96 U
Tetrachloroethene	13 U	13 U	0.32 U	0.64 U	---	0.64 U	1.3 U
Toluene	14 U	14 U	0.49 U	0.98 U	---	0.72 U	1.4 U
trans-1,2-Dichloroethene	60	42	12	11	---	14	14
trans-1,3-Dichloropropene	9.6 U	9.6 U	0.24 U	0.48 U	---	0.48 U	0.96 U
Trichloroethene	2300	3900	290	250	---	270	350
Trichlorofluoromethane	14 U	14 U	0.34 U	0.68 U	---	0.68 U	1.4 U
Trichlorotrifluoroethane (Freon 113)	48 U	48 UJ	18	2.4 U	---	2.4 U	4.8 U
Vinyl chloride	10 U	10 U	4.8	5.8	---	6	7.4
Analytical Method	8260B	8260B	8260B	8260B	8260SIM	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49B	RD-49B	RD-49C	RD-49C	RD-49C	RD-49C	RD-49C
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	11/17/03	11/17/03	02/04/03	05/06/03	08/19/03	11/18/03	11/18/03
Sample Type	Dup	Split	Primary	Primary	Primary	Primary	Dup
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	---	---	0.3 U	0.3 U	0.3 U	0.3 U	---
1,1,2,2-Tetrachloroethane	---	---	0.29 U	0.29 U	0.24 U	0.24 U	---
1,1,2-Trichloroethane	---	---	0.3 U	0.3 U	0.3 U	0.3 U	---
1,1-Dichloroethane	---	---	0.27 U	0.27 U	0.27 U	0.27 U	---
1,1-Dichloroethene	---	---	0.32 U	0.32 U	0.32 U	0.32 U	---
1,2-Dichlorobenzene	---	---	0.32 U	0.32 U	0.32 U	0.32 U	---
1,2-Dichloroethane	---	---	0.28 U	0.28 U	0.28 U	0.28 U	---
1,2-Dichloropropane	---	---	0.35 U	0.35 U	0.35 U	0.35 U	---
1,3-Dichlorobenzene	---	---	0.35 U	0.35 U	0.35 U	0.35 U	---
1,4-Dichlorobenzene	---	---	0.37 U	0.37 U	0.37 U	0.37 U	---
1,4-Dioxane	1.8 U	0.93 J	0.815 J	1.08	0.755 U	0.6 U	0.74 U
2-Butanone	---	---	3.8 U	3.8 U	3.8 U	3.8 U	---
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	---	---	2.5 U	2.5 U	2.6 U	2.6 U	---
4-Methyl-2-pentanone (MIBK)	---	---	2.5 U	2.5 U	2.5 U	2.5 U	---
Acetone	---	---	4.5 U	4.5 U	4.5 U	4.5 U	---
Benzene	---	---	0.28 U	0.28 U	0.28 U	0.28 U	---
Bromodichloromethane	---	---	0.3 U	0.3 U	0.3 U	0.3 U	---
Bromoform	---	---	0.25 U	0.25 U	0.32 U	0.32 UJ	---
Bromomethane	---	---	0.2 U	0.2 U	0.34 U	0.34 U	---
Carbon disulfide	---	---	0.33 U	0.33 U	0.48 U	0.48 U	---
Carbon tetrachloride	---	---	0.28 U	0.28 U	0.28 U	0.28 U	---
Chlorobenzene	---	---	0.36 U	0.36 U	0.36 U	0.36 U	---
Chloroethane	---	---	0.33 U	0.33 U	0.33 U	0.33 U	---
Chloroform	---	---	0.33 U	0.33 U	0.33 U	0.33 U	---
Chloromethane	---	---	0.14 U	0.14 U	0.3 U	0.3 U	---
cis-1,2-Dichloroethene	---	---	77	81	75	75 J	---
cis-1,3-Dichloropropene	---	---	0.22 U	0.22 U	0.22 U	0.22 U	---
Dibromochloromethane	---	---	0.28 U	0.28 U	0.28 U	0.28 U	---
Ethylbenzene	---	---	0.25 U	0.25 U	0.25 U	0.25 U	---
m,p-Xylenes	---	---	0.38 U	0.38 U	0.52 U	0.52 U	---
Methylene chloride	---	---	0.33 U	0.33 U	0.48 U	0.48 U	---
o-Xylene	---	---	0.24 U	0.24 U	0.24 U	0.24 U	---
Tetrachloroethene	---	---	0.32 U	0.32 U	0.32 U	0.32 U	---
Toluene	---	---	0.49 U	0.49 U	0.36 U	0.36 U	---
trans-1,2-Dichloroethene	---	---	3.9	2.9	2.7	2.4	---
trans-1,3-Dichloropropene	---	---	0.24 U	0.24 U	0.24 U	0.24 U	---
Trichloroethene	---	---	26	24	24	24	---
Trichlorofluoromethane	---	---	0.34 U	0.34 U	0.34 U	0.34 U	---
Trichlorotrifluoroethane (Freon 113)	---	---	5	1.2 U	1.2 U	1.2 UJ	---
Vinyl chloride	---	---	2.3	2.5	2	2.6	---
Analytical Method	8260SIM	8260SIM	8260B	8260B	8260B	8260B	8260SIM
Laboratory	Ceimic	DMA	DMA	DMA	DMA	DMA	Ceimic

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49C	RD-50	RD-50	RD-51B	RD-51B	RD-51C	RD-51C
FLUTe Sample Port	---	Z2	Z2	---	---	---	---
Sample Date	11/18/03	02/17/03	08/28/03	02/12/03	08/21/03	02/13/03	02/13/03
Sample Type	Split	Primary	Primary	Primary	Primary	Primary	Split
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	---	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1,2,2-Tetrachloroethane	---	0.29 U	0.24 U	0.29 U	0.24 U	0.29 U	0.4 U
1,1,2-Trichloroethane	---	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1-Dichloroethane	---	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U
1,1-Dichloroethene	---	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.3 U
1,2-Dichlorobenzene	---	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
1,2-Dichloroethane	---	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
1,2-Dichloropropane	---	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.4 U
1,3-Dichlorobenzene	---	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.2 U
1,4-Dichlorobenzene	---	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.2 U
1,4-Dioxane	0.49 U	---	---	---	---	---	---
2-Butanone	---	6.9 J,F	3.8 U	3.8 U	3.8 U	3.8 U	7 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	0.3 U
2-Hexanone	---	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U	0.7 U
4-Methyl-2-pentanone (MIBK)	---	3.6 J,F	2.5 U	2.5 U	2.5 U	2.5 U	0.2 U
Acetone	---	19 F	4.5 U	4.5 U	4.5 U	4.5 U	3 U
Benzene	---	0.5 F	1.2 F	0.28 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	---	0.6 J,F	0.3 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	---	0.25 U	0.32 U	0.25 U	0.32 U	0.25 U	0.4 U
Bromomethane	---	0.2 U	0.34 U	0.2 U	0.34 U	0.2 U	0.5 U
Carbon disulfide	---	0.33 U	0.48 U	0.59 J	0.48 U	0.33 U	0.2 U
Carbon tetrachloride	---	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U
Chlorobenzene	---	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	---	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.3 U
Chloroform	---	0.38 J,F	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U
Chloromethane	---	0.14 U	0.3 U	0.14 U	0.3 U	0.14 U	0.4 U
cis-1,2-Dichloroethene	---	0.32 U	0.32 U	22	25	0.32 U	0.2 U
cis-1,3-Dichloropropene	---	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.2 U
Dibromochloromethane	---	0.88 J,F	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
Ethylbenzene	---	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U
m,p-Xylenes	---	0.38 U	0.52 U	0.38 U	0.52 U	0.38 U	0.3 U
Methylene chloride	---	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U	3 U
o-Xylene	---	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Tetrachloroethene	---	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
Toluene	---	100 F	21 F	0.49 U	0.36 U	0.49 U	0.2 U
trans-1,2-Dichloroethene	---	0.27 U	0.27 U	2.8	2.8	0.27 U	0.2 U
trans-1,3-Dichloropropene	---	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Trichloroethene	---	1.3 F	0.63 J,S	6.5	5.9	0.26 U	0.2 U
Trichlorofluoromethane	---	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.1 U
Trichlorotrifluoroethane (Freon 113)	---	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.2 U
Vinyl chloride	---	0.19 U	0.26 U	17	17	0.19 U	0.2 U
Analytical Method	8260SIM	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-51C	RD-51C	RD-51C	RD-51C	RD-52B	RD-52B	RD-52C
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	05/08/03	08/19/03	11/07/03	11/07/03	02/11/03	08/14/03	02/17/03
Sample Type	Primary	Primary	Primary	Split	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.24 U	0.4 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	7 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	0.3 U	---	---	---
2-Hexanone	2.5 U	2.6 U	2.6 U	0.7 U	2.5 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	3 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.32 U	0.4 U	0.25 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.34 U	0.34 U	0.5 U	0.2 U	0.34 U	0.2 U
Carbon disulfide	0.33 U	0.48 U	0.48 U	0.2 U	0.33 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	0.3 U	0.4 U	0.14 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.2 U	9.4	9.7	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.52 U	0.3 U	0.38 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.48 U	0.48 U	3 U	0.33 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	0.36 U	0.2 U	0.49 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.2 U	3.2	3.2	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.2 U	4.5	3.3	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.26 U	0.2 U	0.19 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	AMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-52C	RD-52C	RD-52C	RD-52C	RD-54A	RD-54A	RD-54B
FLUTE Sample Port	---	---	---	---	Z2	Z2	---
Sample Date	05/14/03	05/14/03	08/12/03	11/19/03	02/18/03	08/26/03	02/26/03
Sample Type	Primary	Dup	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	HS
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.24 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.38 J	0.35 J	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.73 J	1	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.81	0.84	0.57
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.6 U	2.5 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	7.8 U	4.5 U	5.3 J,L	4.5 U	6 J
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.3 J,F	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.32 U	0.25 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.34 U	0.2 U	0.34 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.48 U	2.8 J
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	1.2
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	1.2	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.3 U	0.3 U	0.14 U	0.3 U	0.39 J
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	2.5	38	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.36 J,F	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.52 U	0.38 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.48 U	0.67 J,L
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.36 U	0.36 U	1.7 F	1.4	0.58 J
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.84 J	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	7.3	5.1	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 J,S	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.26 U	0.19 U	0.26 U	0.19 J
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-54B	RD-54B	RD-54C	RD-54C	RD-55A	RD-55A	RD-55A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	08/07/03	08/07/03	02/26/03	08/26/03	02/13/03	02/13/03	02/13/03
Sample Type	Primary	Dup	Primary	Primary	Primary	Dup	Split
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.29 U	0.24 U	0.29 U	0.29 U	0.4 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.3 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.4 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.2 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.2 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	0.3 U
2-Hexanone	2.6 U	2.6 U	2.5 U	2.6 U	2.5 U	2.5 U	0.7 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.2 U
Acetone	4.5 U	4.5 U	5.1 J	4.5 U	7.8 U	23 U	3 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	0.32 U	0.32 U	0.25 U	0.32 U	0.25 U	0.25 U	0.4 U
Bromomethane	0.34 U	0.34 U	0.2 U	0.34 U	0.2 U	0.2 U	0.5 U
Carbon disulfide	0.48 U	0.48 U	0.42 J	0.48 U	0.33 U	0.33 U	0.2 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.3 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U
Chloromethane	0.3 U	0.3 U	0.14 U	0.3 U	0.37 J	0.19 J	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	84	84	75
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.2 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U
m,p-Xylenes	0.52 U	0.52 U	0.38 U	0.52 U	0.38 U	0.38 U	0.3 U
Methylene chloride	0.48 U	0.48 U	0.33 U	0.48 U	0.33 U	0.33 U	3 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
Toluene	0.36 U	0.36 U	0.49 U	0.36 U	0.49 U	0.49 U	0.2 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	3	2.7	1.5
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.5 J,C	83	82	72
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.1 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.2 U
Vinyl chloride	0.26 U	0.26 U	0.19 U	0.26 U	5.4	5.2	4
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	AMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-55A	RD-55A	RD-55A	RD-55A	RD-55A	RD-55B	RD-55B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/05/03	05/05/03	08/18/03	08/18/03	08/18/03	02/19/03	05/06/03
Sample Type	Primary	Dup	Primary	Dup	Split	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	1.5 U	1.5 U	0.2 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	1.2 U	1.2 U	0.4 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	1.5 U	1.5 U	0.2 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	1.4 U	1.4 U	0.2 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	1.6 U	1.6 U	1.2	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	1.6 U	1.6 U	0.2 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	1.4 U	1.4 U	0.2 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	1.8 U	1.8 U	0.4 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	1.8 U	1.8 U	0.2 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	1.8 U	1.8 U	0.2 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	19 U	19 U	7 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	0.3 U	---	---
2-Hexanone	2.5 U	2.5 U	13 U	13 U	0.7 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	12 U	12 U	0.2 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	22 U	22 U	3 U	13	4.5 U
Benzene	0.28 U	0.28 U	1.4 U	1.4 U	0.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	1.5 U	1.5 U	0.1 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	1.6 U	1.6 U	0.4 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	1.7 U	1.7 U	0.5 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	2.4 U	2.4 U	0.2 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	1.4 U	1.4 U	0.3 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	1.8 U	1.8 U	0.1 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	1.6 U	1.6 U	0.3 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	1.8 J,S	2 J,S	0.2 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	1.5 U	1.5 U	0.4 U	0.25 J	0.14 U
cis-1,2-Dichloroethene	27	20	560	550	500	8.8	9.5
cis-1,3-Dichloropropene	0.22 U	0.22 U	1.1 U	1.1 U	0.2 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	1.4 U	1.4 U	0.2 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	1.2 U	1.2 U	0.2 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	2.6 U	2.6 U	0.3 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	14 J,L	13 J,L	3 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	1.2 U	1.2 U	0.2 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	1.6 U	1.6 U	0.2 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	1.8 U	1.8 U	0.2 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	1.4	0.94 J	30	30	24	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	1.2 U	1.2 U	0.2 U	0.24 U	0.24 U
Trichloroethene	25	20	490	470	430	11	13
Trichlorofluoromethane	0.34 U	0.34 U	1.7 U	1.7 U	0.1 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	6 U	6 U	0.2 U	1.2 U	1.2 U
Vinyl chloride	6.4	4.4	73	71	68	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	AMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-55B	RD-55B	RD-55B	RD-55B	RD-56A	RD-56B	RD-56B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	05/06/03	08/22/03	08/22/03	08/22/03	02/24/03	02/19/03	08/12/03
Sample Type	Dup	Primary	Dup	Split	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	pH	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	1.2 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.24 U	0.4 U	1.2 U	0.29 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.2 U	1.2 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.2 U	1.1 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.3 U	1.3 J	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.2 U	1.3 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.2 U	1.1 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.4 U	1.4 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.2 U	1.4 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.2 U	1.5 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	7 U	15 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	0.3 U	---	---	---
2-Hexanone	2.5 U	2.6 U	2.6 U	0.7 U	10 U	2.5 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	0.2 U	10 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	3 U	18 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.1 U	1.1 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.1 U	1.2 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.32 U	0.4 U	1 U	0.25 U	0.32 U
Bromomethane	0.2 U	0.34 U	0.34 U	0.5 U	0.8 U	0.2 U	0.34 U
Carbon disulfide	0.33 U	0.48 U	0.48 U	0.2 U	1.7 J	0.33 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.3 U	1.1 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.1 U	1.4 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.3 U	1.3 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.2 U	1.3 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	0.3 U	0.4 U	0.56 U	0.14 U	0.3 U
cis-1,2-Dichloroethene	6.2	9.5	9.5	7.9	340	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.2 U	0.88 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.2 U	1.1 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.2 U	1 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.52 U	0.3 U	1.5 U	0.38 U	0.52 U
Methylene chloride	0.33 U	0.55 U	0.76 U	3 U	1.3 U	0.33 U	0.55 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.2 U	0.96 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.2 U	1.3 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	0.36 U	0.2 U	2 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.2 U	29	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.2 U	0.96 U	0.24 U	0.24 U
Trichloroethene	8.6	12	12	12	420	0.39 J	0.39 J
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.1 U	1.4 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	0.2 U	4.8 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.26 U	0.2 U	10	0.19 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	AMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-56B	RD-56B	RD-56B	RD-57	RD-57	RD-57	RD-57
FLUTE Sample Port	---	---	---	Z8	Z8	Z8	Z8
Sample Date	11/11/03	11/11/03	11/11/03	01/29/03	04/30/03	08/27/03	11/18/03
Sample Type	Primary	Dup	Split	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.4 U	0.29 U	0.29 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	7 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	0.3 U	---	---	---	---
2-Hexanone	2.6 U	2.6 U	0.7 U	2.5 U	2.5 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	3 U	4.5 U	7.4 U	6.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.42 J,F	0.42 J,F	0.6 F	0.33 J,F
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.32 U	0.4 U	0.25 U	0.25 U	0.32 U	0.32 U
Bromomethane	0.34 U	0.34 U	0.5 U	0.2 U	0.2 U	0.34 U	0.34 U
Carbon disulfide	0.48 U	0.48 U	0.2 U	0.33 U	0.33 U	0.48 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	0.55 J,F	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.3 U	0.4 U	0.14 U	0.14 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.52 U	0.3 U	0.38 U	0.38 U	0.52 U	0.52 U
Methylene chloride	0.5 U	0.54 U	3 U	0.33 U	0.33 U	0.48 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.2 U	0.49 U	0.49 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.35 J	0.36 J	0.2 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.26 U	0.2 U	0.19 U	0.19 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	AMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-58A	RD-58A	RD-58B	RD-58B	RD-58B	RD-58B	RD-58C
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/03/03	12/09/03	01/31/03	05/05/03	08/19/03	11/19/03	02/03/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.29 U	0.29 U	0.24 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	2.5 U	2.5 U	2.6 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.25 U	0.25 U	0.32 U	0.32 U	0.25 U
Bromomethane	0.2 U	0.34 U	0.2 U	0.2 U	0.34 U	0.34 U	0.2 U
Carbon disulfide	0.33 U	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	0.14 U	0.14 U	0.3 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	1.5	1.6	0.32 U	0.32 U	0.32 U	0.32 U	0.59 J
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.38 U	0.38 U	0.52 U	0.52 U	0.38 U
Methylene chloride	0.33 U	0.48 U	4.1 U	0.33 U	0.48 U	0.48 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	0.49 U	0.49 U	0.36 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	190	180	0.26 U	0.26 U	0.26 U	0.26 U	0.5 J
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	2.9 J	4.6 J	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.19 U	0.19 U	0.26 U	0.26 U	1.1
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-58C	RD-59A	RD-59A	RD-59A	RD-59A	RD-59B	RD-59B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	08/18/03	01/31/03	05/15/03	08/08/03	11/14/03	01/31/03	05/15/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.29 U	0.29 U	0.24 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.5 U	2.5 U	2.6 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.7 J,L	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.25 U	0.25 U	0.32 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.34 U	0.2 U	0.2 U	0.99 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.91 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.14 U	0.14 U	0.27 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.64 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.38 U	0.38 U	0.52 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.48 U	3.4 J,L	0.33 U	0.48 U	0.48 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.49 U	0.49 U	0.36 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.88	0.19 U	0.19 U	0.26 U	0.26 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV

SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-59B	RD-59B	RD-59C	RD-59C	RD-59C	RD-59C	RD-60
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	08/08/03	12/04/03	01/31/03	05/15/03	08/08/03	12/04/03	05/15/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.29 U	0.29 U	0.24 U	0.24 U	0.58 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.3
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	2.1
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	7.2
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.7 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.7 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.74 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7.6 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	2.6 U	2.5 U	2.5 U	2.6 U	2.6 U	5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	9 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.6 U
Bromoform	0.32 U	0.32 U	0.25 U	0.25 U	0.32 U	0.32 U	0.5 U
Bromomethane	0.99 U	0.34 U	0.2 U	0.2 U	0.99 U	0.34 U	0.4 U
Carbon disulfide	0.48 U	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	0.66 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.72 U
Chloroethane	0.91 U	0.33 U	0.33 U	0.33 U	0.91 U	0.33 U	0.66 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.66 U
Chloromethane	0.27 U	0.33 J,L	0.14 U	0.14 U	0.27 U	0.35 J,L	0.28 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	7.7
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.44 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.56 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.5 U
m,p-Xylenes	0.52 U	0.52 U	0.38 U	0.38 U	0.52 U	0.52 U	0.76 U
Methylene chloride	0.48 U	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	0.66 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.64 U
Toluene	0.36 U	0.36 U	0.49 U	0.49 U	0.36 U	0.36 U	0.98 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.54 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.48 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	210
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.68 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	2.4 U
Vinyl chloride	0.26 U	0.26 U	0.19 U	0.19 U	0.26 U	0.26 U	0.38 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-60	RD-61	RD-61	RD-61	RD-61	RD-61	RD-61
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	08/26/03	02/14/03	05/08/03	08/26/03	12/03/03	12/03/03	12/03/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Dup	Split
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	1.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1,2,2-Tetrachloroethane	0.96 U	0.29 U	0.29 U	0.24 U	0.24 U	0.24 U	0.4 U
1,1,2-Trichloroethane	1.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1-Dichloroethane	3.9 J	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U
1,1-Dichloroethene	3.3 J	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.3 U
1,2-Dichlorobenzene	1.3 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
1,2-Dichloroethane	8.1	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
1,2-Dichloropropane	1.4 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.4 U
1,3-Dichlorobenzene	1.4 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.2 U
1,4-Dichlorobenzene	1.5 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.2 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	15 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	0.3 U
2-Hexanone	10 U	2.5 U	2.5 U	2.6 U	2.6 U	2.6 U	0.7 U
4-Methyl-2-pentanone (MIBK)	10 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.2 U
Acetone	34 U	5.8 J	6.2 J,L	4.5 U	4.5 U	4.5 U	3 U
Benzene	1.1 U	0.28 U	0.28 U	0.68 L	0.28 U	0.28 U	0.1 U
Bromodichloromethane	1.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	1.3 U	0.25 U	0.25 U	0.32 U	0.32 U	0.32 U	0.4 U
Bromomethane	1.4 U	0.2 U	0.2 U	0.34 U	0.34 U	0.34 U	0.5 U
Carbon disulfide	1.9 U	0.33 U	0.33 U	0.48 U	0.48 U	0.48 U	0.2 U
Carbon tetrachloride	1.1 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U
Chlorobenzene	1.4 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	1.3 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.3 U
Chloroform	1.3 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U
Chloromethane	1.2 U	0.32 J	0.14 U	0.3 U	0.3 U	0.3 U	0.4 U
cis-1,2-Dichloroethene	10	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
cis-1,3-Dichloropropene	0.88 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.2 U
Dibromochloromethane	1.1 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
Ethylbenzene	1 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U
m,p-Xylenes	2.1 U	0.38 U	0.38 U	0.52 U	0.52 U	0.52 U	0.3 U
Methylene chloride	1.9 U	0.33 U	0.33 U	0.48 U	0.48 U	0.48 U	3 U
o-Xylene	0.96 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Tetrachloroethene	1.3 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
Toluene	1.4 U	0.49 U	0.49 U	0.36 U	0.36 U	0.36 U	0.2 U
trans-1,2-Dichloroethene	1.1 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U
trans-1,3-Dichloropropene	0.96 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Trichloroethene	320	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.2 U
Trichlorofluoromethane	1.4 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.1 U
Trichlorotrifluoroethane (Freon 113)	4.8 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.2 U
Vinyl chloride	1 U	0.19 U	0.19 U	0.26 U	0.26 U	0.26 U	0.2 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	AMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-62	RD-62	RD-62	RD-63	RD-63	RD-64	RD-65
FLUTe Sample Port	---	---	---	---	---	Z6	Z4
Sample Date	02/10/03	05/02/03	11/21/03	02/05/03	08/26/03	01/29/03	01/28/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.29 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.97 J	0.77 J	0.27 U	2.7
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.98 J	0.99 J	0.49 J	10
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.52
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	5.3 J	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.5 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	6.5 U	5.3 U	4.5 U	4.5 U	18 F	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	1.9 F	0.33 J,F
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.25 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.2 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.48 U	0.4 J	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.84 J,F	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.29 J	0.3 U	0.14 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	4	3.9	66	4.8
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.38 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.48 U	0.33 U	0.48 U	0.33 U	0.73 J,L
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.36 U	0.49 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.4 J	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	3.3	6.6	130	11
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	1
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.19 U	0.26 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-66	RD-66	RD-66	RD-67	RD-67	RD-68A	RD-68A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/10/03	05/08/03	05/08/03	02/19/03	08/21/03	02/04/03	05/15/03
Sample Type	Primary	Primary	Dup	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.29 U	0.29 U	0.24 U	0.29 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.5 U	2.5 U	2.6 U	2.5 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	23 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.25 U	0.25 U	0.32 U	0.25 U	0.25 U
Bromomethane	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U	0.2 U	0.2 U
Carbon disulfide	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.14 U	0.14 U	0.3 U	0.14 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.38 U	0.38 U	0.52 U	0.38 U	0.38 U
Methylene chloride	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U	0.33 U	0.33 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.49 U	0.49 U	0.36 U	0.49 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.19 U	0.19 U	0.26 U	0.19 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-68A	RD-68A	RD-68B	RD-68B	RD-68B	RD-68B	RD-68B
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	08/07/03	12/04/03	02/04/03	05/15/03	08/07/03	12/04/03	12/04/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Split
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.29 U	0.29 U	0.24 U	0.24 U	0.4 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.2 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.3 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.4 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.2 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.2 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	7 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	0.3 U
2-Hexanone	2.6 U	2.6 U	2.5 U	2.5 U	2.6 U	2.6 U	0.7 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	0.2 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	3 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.1 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.1 U
Bromoform	0.32 U	0.32 U	0.25 U	0.25 U	0.32 U	0.32 U	0.4 U
Bromomethane	0.99 U	0.34 U	0.2 U	0.2 U	0.34 U	0.34 U	0.5 U
Carbon disulfide	0.48 U	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	0.2 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.3 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.1 U
Chloroethane	0.91 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.3 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.2 U
Chloromethane	0.27 U	0.3 U	0.14 U	0.14 U	0.3 U	0.3 U	0.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.2 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.2 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.2 U
m,p-Xylenes	0.52 U	0.52 U	0.38 U	0.38 U	0.52 U	0.52 U	0.3 U
Methylene chloride	0.48 U	0.48 U	0.33 U	0.33 U	0.48 U	0.48 U	3 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.2 U
Toluene	0.36 U	0.36 U	0.49 U	0.49 U	0.36 U	0.36 U	0.2 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.2 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.2 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.2 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.1 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	0.2 U
Vinyl chloride	0.26 U	0.26 U	0.19 U	0.19 U	0.26 U	0.26 U	0.2 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	AMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-69	RD-69	RD-70	RD-70	RD-71	RD-71	RD-72
FLUTe Sample Port	---	---	---	---	---	---	Z7
Sample Date	02/11/03	08/26/03	02/05/03	05/01/03	02/10/03	05/08/03	01/27/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.29 U	0.29 U	0.29 U	0.29 U	2.9 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	13
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	110
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	3.2 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	3.5 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	3.7 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	38 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	25 U
Acetone	4.5 U	4.5 U	4.5 U	5.2 J	4.5 U	4.5 U	45 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	3 U
Bromoform	0.25 U	0.32 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U
Bromomethane	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	2 U
Carbon disulfide	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U	0.33 U	3.3 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	3.6 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	3.3 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	3.3 U
Chloromethane	0.14 U	0.3 U	0.14 U	0.25 J	0.14 U	0.14 U	1.4 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	1000
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	2.2 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	2.8 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	2.5 U
m,p-Xylenes	0.38 U	0.52 U	0.38 U	0.38 U	0.38 U	0.38 U	3.8 U
Methylene chloride	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U	0.33 U	7.8 J,L
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	3.2 U
Toluene	0.49 U	0.36 U	0.49 U	0.49 U	0.49 U	0.49 U	4.9 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	2.8 J
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	2.4 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	1400
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	3.4 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	12 U
Vinyl chloride	0.19 U	0.26 U	0.19 U	0.19 U	0.19 U	0.19 U	3.6 J
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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27-February-2004

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-73	HAR-06	HAR-07	HAR-07	HAR-07	HAR-16	HAR-17
FLUTe Sample Port	Z9	---	---	---	---	Comp	---
Sample Date	01/27/03	02/21/03	04/16/03	04/16/03	11/21/03	04/17/03	04/16/03
Sample Type	Primary	Primary	Primary	Split	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	6.3 J	0.3 U	12 U	---	15 U	15 U	0.3 U
1,1,2,2-Tetrachloroethane	2.9 U	0.29 U	12 U	---	12 U	14 U	0.29 U
1,1,2-Trichloroethane	3 U	0.3 U	12 U	---	15 U	15 U	0.3 U
1,1-Dichloroethane	16	8.9	11 U	---	14 U	14 U	0.49 J
1,1-Dichloroethene	340	36	13 U	---	16 U	16 U	1.6 J
1,2-Dichlorobenzene	3.2 U	0.32 U	13 U	---	16 U	16 U	0.32 U
1,2-Dichloroethane	11	0.28 U	11 U	---	14 U	14 U	0.28 U
1,2-Dichloropropane	3.5 U	0.35 U	14 U	---	18 U	18 U	0.35 U
1,3-Dichlorobenzene	3.5 U	0.35 U	14 U	---	18 U	18 U	0.35 U
1,4-Dichlorobenzene	3.7 U	0.37 U	15 U	---	18 U	18 U	0.37 U
1,4-Dioxane	---	---	0.07 U	0.54 U	---	43	5.44
2-Butanone	38 U	3.8 U	150 U	---	190 U	190 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	25 U	2.5 U	100 U	---	130 U	120 U	2.5 U
4-Methyl-2-pentanone (MIBK)	25 U	2.5 U	100 U	---	120 U	120 U	2.5 U
Acetone	45 U	4.5 U	180 U	---	220 U	220 U	4.6 J
Benzene	140	0.28 U	11 U	---	18 J	14 U	0.28 U
Bromodichloromethane	3 U	0.3 U	12 U	---	15 U	15 U	0.3 U
Bromoform	2.5 U	0.25 U	10 U	---	16 U	12 U	0.25 U
Bromomethane	2 U	0.2 U	8 U	---	17 U	10 U	0.2 U
Carbon disulfide	3.3 U	0.33 U	13 U	---	24 U	16 U	0.33 U
Carbon tetrachloride	2.8 U	0.28 U	11 U	---	14 U	14 U	0.28 U
Chlorobenzene	3.6 U	0.36 U	14 U	---	18 U	18 U	0.36 U
Chloroethane	3.3 U	0.33 U	13 U	---	16 U	16 U	0.33 U
Chloroform	3.3 U	0.33 U	13 U	---	16 U	16 U	0.33 U
Chloromethane	1.4 U	0.14 U	5.6 U	---	15 U	7 U	0.14 U
cis-1,2-Dichloroethene	1100	6.3	2800	---	3200	250	20
cis-1,3-Dichloropropene	2.2 U	0.22 U	8.8 U	---	11 U	11 U	0.22 U
Dibromochloromethane	2.8 U	0.28 U	11 U	---	14 U	14 U	0.28 U
Ethylbenzene	4.1 J	0.25 U	10 U	---	12 U	12 U	0.25 U
m,p-Xylenes	7 J	0.38 U	15 U	---	26 U	19 U	0.38 U
Methylene chloride	6.8 J,L	0.33 U	17 U	---	24 U	37 U	0.62 U
o-Xylene	2.4 U	0.24 U	9.6 U	---	12 U	12 U	0.24 U
Tetrachloroethene	3.2 U	0.32 U	13 U	---	16 U	16 U	0.32 U
Toluene	4.9 U	0.49 U	20 U	---	18 U	24 U	0.49 U
trans-1,2-Dichloroethene	2.7 U	0.38 J	99	---	120	14 U	1.7 J
trans-1,3-Dichloropropene	2.4 U	0.24 U	9.6 U	---	12 U	12 U	0.24 U
Trichloroethene	400	1.1	3300	---	5600	2300	93 J
Trichlorofluoromethane	3.4 U	0.34 U	14 U	---	17 U	17 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	13 J	1.2 U	---	---	60 U	---	---
Vinyl chloride	68	1	110 J	---	54	9.5 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260SIM	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	HAR-17	HAR-17	HAR-18	HAR-18	HAR-21	HAR-22	HAR-22
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	04/16/03	11/21/03	02/25/03	08/26/03	02/27/03	02/26/03	08/21/03
Sample Type	Dup	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	15 U	4.5 J	12 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	14 U	2.4 U	12 U	0.29 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	15 U	3 U	12 U	0.3 U	0.3 U
1,1-Dichloroethane	0.44 J	0.93 J	14 J	7.9 J	11 U	0.27 U	0.27 U
1,1-Dichloroethene	1.9 J	2.1	290	110	13 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	16 U	3.2 U	13 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	14 U	2.8 U	11 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	18 U	3.5 U	14 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	18 U	3.5 U	14 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	18 U	3.7 U	15 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	190 U	38 U	150 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	120 U	26 U	100 U	2.5 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	120 U	25 U	100 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	220 U	45 U	180 U	4.5 U	6.7 U
Benzene	0.28 U	0.28 U	14 U	2.8 U	11 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	15 U	3 U	12 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	12 U	3.2 U	10 U	0.25 U	0.32 U
Bromomethane	0.2 U	0.34 U	10 U	3.4 U	8 U	0.2 U	0.34 U
Carbon disulfide	0.33 U	0.48 U	16 U	4.8 U	13 U	0.33 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	14 U	2.8 U	11 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	18 U	3.6 U	14 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	16 U	3.3 U	13 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	16 U	3.3 U	13 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	7 U	3 U	5.6 U	0.14 U	0.3 U
cis-1,2-Dichloroethene	18	24	3900	2500	210	9.5	9.4
cis-1,3-Dichloropropene	0.22 U	0.22 U	11 U	2.2 U	8.8 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	14 U	2.8 U	11 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	12 U	2.5 U	10 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	19 U	5.2 U	15 U	0.38 U	0.52 U
Methylene chloride	0.38 U	0.48 U	16 U	4.8 U	13 U	0.33 U	0.48 U
o-Xylene	0.24 U	0.24 U	12 U	2.4 U	9.6 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	16 U	3.2 U	13 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	24 U	3.6 U	20 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	1.1 J	1	320	170	21 J	0.61 J	0.42 J
trans-1,3-Dichloropropene	0.24 U	0.24 U	12 U	2.4 U	9.6 U	0.24 U	0.24 U
Trichloroethene	83	100	7300	5100	10 U	2.7	2.5
Trichlorofluoromethane	0.34 U	0.34 U	17 U	3.4 U	14 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	---	6.6	740	420	48 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	85	83	54	0.66	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	HAR-23	HAR-23	HAR-25	HAR-26	HAR-26	HAR-26	HAR-26
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/27/03	08/26/03	02/27/03	02/26/03	05/15/03	05/15/03	08/26/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Dup	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.24 U	0.29 U	0.29 U	0.29 U	0.29 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.86 J	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.5 U	2.6 U	2.5 U	2.5 U	2.5 U	2.5 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.32 U	0.25 U	0.25 U	0.25 U	0.25 U	0.32 U
Bromomethane	0.2 U	0.34 U	0.2 U	0.2 U	0.2 U	0.2 U	0.34 U
Carbon disulfide	0.33 U	0.48 U	0.46 J	0.33 U	0.33 U	0.33 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.5	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	1.5	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.3 U	0.14 U	0.14 U	0.14 U	0.14 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.52 U	0.38 U	0.38 U	0.38 U	0.38 U	0.52 U
Methylene chloride	0.33 U	0.48 U	0.33 U	0.33 U	0.33 U	0.33 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	6	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.36 U	0.49 U	0.49 U	0.49 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	1.9	3	91	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	95	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.3 J	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.26 U	0.19 U	0.19 U	0.19 U	0.19 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-04A	WS-04A	WS-04A	WS-04A	WS-04A	WS-04A	WS-04A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/19/03	02/19/03	02/19/03	05/09/03	05/09/03	12/03/03	12/03/03
Sample Type	Primary	Dup	Split	Primary	Dup	Primary	Dup
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.4 U	0.29 U	0.29 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	10 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	0.3 U	---	---	---	---
2-Hexanone	2.5 U	2.5 U	0.7 U	2.5 U	2.5 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	6.5 J,L	4.7 J,L	3 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.4 U	0.25 U	0.25 U	0.32 U	0.32 U
Bromomethane	0.2 U	0.2 U	0.5 U	0.2 U	0.2 U	0.34 U	0.34 U
Carbon disulfide	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.48 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.4 U	0.14 U	0.14 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.3 U	0.38 U	0.38 U	0.52 U	0.52 U
Methylene chloride	0.33 U	0.33 U	3 U	0.33 U	0.33 U	0.48 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.2 U	0.49 U	0.49 U	0.64 J	0.64 J
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.2 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.2 U	0.19 U	0.19 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	AMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-04A	WS-05	WS-05	WS-05	WS-06	WS-06	WS-06
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	12/03/03	02/04/03	05/05/03	05/05/03	02/03/03	05/07/03	08/19/03
Sample Type	Split	Primary	Primary	Split	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.2 U	0.3 U	0.3 U	---	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.4 U	0.29 U	0.29 U	---	0.29 U	0.29 U	0.24 U
1,1,2-Trichloroethane	0.2 U	0.3 U	0.3 U	---	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.2 U	0.27 U	0.27 U	---	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.3 U	0.32 U	0.32 U	---	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.2 U	0.32 U	0.32 U	---	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.2 U	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.4 U	0.35 U	0.35 U	---	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.2 U	0.35 U	0.35 U	---	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.2 U	0.37 U	0.37 U	---	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	2.17 J	2.38	2.6 U	0.768 J	0.898 J	0.698 U
2-Butanone	7 U	3.8 U	3.8 U	---	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	0.3 U	---	---	---	---	---	---
2-Hexanone	0.7 U	2.5 U	2.5 U	---	2.5 U	2.5 U	2.6 U
4-Methyl-2-pentanone (MIBK)	0.2 U	2.5 U	2.5 U	---	2.5 U	2.5 U	2.5 U
Acetone	3 U	4.5 U	4.5 U	---	4.5 U	4.5 U	4.5 U
Benzene	0.1 U	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.1 U	0.3 U	0.3 U	---	0.3 U	0.3 U	0.3 U
Bromoform	0.4 U	0.25 U	0.25 U	---	0.25 U	0.25 U	0.32 U
Bromomethane	0.5 U	0.2 U	0.2 U	---	0.2 U	0.2 U	0.34 U
Carbon disulfide	0.2 U	0.33 U	0.33 U	---	0.33 U	0.33 U	0.48 U
Carbon tetrachloride	0.3 U	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.1 U	0.36 U	0.36 U	---	0.36 U	0.36 U	0.36 U
Chloroethane	0.3 U	0.33 U	0.33 U	---	0.33 U	0.33 U	0.33 U
Chloroform	0.2 U	0.33 U	0.33 U	---	0.33 U	0.33 U	0.33 U
Chloromethane	0.4 U	0.14 U	0.14 U	---	0.14 U	0.14 U	0.3 U
cis-1,2-Dichloroethene	0.2 U	2.9	2.6	---	38	36	47
cis-1,3-Dichloropropene	0.2 U	0.22 U	0.22 U	---	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.2 U	0.28 U	0.28 U	---	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.2 U	0.25 U	0.25 U	---	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.3 U	0.38 U	0.38 U	---	0.38 U	0.38 U	0.52 U
Methylene chloride	3 U	0.33 U	0.33 U	---	0.33 U	0.33 U	0.48 U
o-Xylene	0.2 U	0.24 U	0.24 U	---	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.2 U	0.32 U	0.32 U	---	0.32 U	0.32 U	0.32 U
Toluene	0.46 J	0.49 U	0.49 U	---	0.49 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	0.2 U	0.27 U	0.27 U	---	6	6.1	8.1
trans-1,3-Dichloropropene	0.2 U	0.24 U	0.24 U	---	0.24 U	0.24 U	0.24 U
Trichloroethene	0.2 U	1.5	1.3	---	7	2.8	4.6
Trichlorofluoromethane	0.1 U	0.34 U	0.34 U	---	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	0.2 U	1.2 U	1.2 U	---	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.2 U	0.19 U	0.19 U	---	1.8	1.5	2.1
Analytical Method	8260B	8260B	8260B	8260SIM	8260B	8260B	8260B
Laboratory	AMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-06	WS-09	WS-09	WS-09A	WS-09A	WS-09A	WS-09A
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	11/19/03	02/03/03	05/07/03	02/12/03	05/01/03	08/26/03	12/03/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	12 U	12 U	0.3 U	0.3 U	0.3 U	6 U
1,1,2,2-Tetrachloroethane	0.24 U	12 U	12 U	0.29 U	0.29 U	0.24 U	4.8 U
1,1,2-Trichloroethane	0.3 U	12 U	12 U	0.3 U	0.3 U	0.3 U	6 U
1,1-Dichloroethane	0.27 U	11 U	11 U	0.27 U	0.27 U	0.27 U	5.4 U
1,1-Dichloroethene	0.32 U	13 U	13 U	0.32 U	0.32 U	2.2	6.4 U
1,2-Dichlorobenzene	0.32 U	13 U	13 U	0.32 U	0.32 U	0.32 U	6.4 U
1,2-Dichloroethane	0.28 U	11 U	11 U	0.28 U	0.28 U	0.28 U	5.6 U
1,2-Dichloropropane	0.35 U	14 U	14 U	0.35 U	0.35 U	0.35 U	7 U
1,3-Dichlorobenzene	0.35 U	14 U	14 U	0.35 U	0.35 U	0.35 U	7 U
1,4-Dichlorobenzene	0.37 U	15 U	15 U	0.37 U	0.37 U	0.37 U	7.4 U
1,4-Dioxane	0.79 U	1.93 J	3.71	---	---	---	---
2-Butanone	3.8 U	150 U	150 U	3.8 U	3.8 U	3.8 U	76 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---	---
2-Hexanone	2.6 U	100 U	100 U	2.5 U	2.5 U	2.6 U	52 U
4-Methyl-2-pentanone (MIBK)	2.5 U	100 U	100 U	2.5 U	2.5 U	2.5 U	50 U
Acetone	4.5 U	180 U	180 U	39	4.5 U	4.5 U	90 U
Benzene	0.28 U	11 U	11 U	0.28 U	0.28 U	0.28 U	5.6 U
Bromodichloromethane	0.3 U	12 U	12 U	0.3 U	0.3 U	0.3 U	6 U
Bromoform	0.32 U	10 U	10 U	0.25 U	0.25 U	0.32 U	6.4 U
Bromomethane	0.34 U	8 U	8 U	0.2 U	0.2 U	0.34 U	6.8 U
Carbon disulfide	0.48 U	13 U	13 U	0.33 U	0.33 U	0.48 U	9.6 U
Carbon tetrachloride	0.28 U	11 U	11 U	0.28 U	0.28 U	0.28 U	5.6 U
Chlorobenzene	0.36 U	14 U	14 U	0.36 U	0.36 U	0.36 U	7.2 U
Chloroethane	0.33 U	13 U	13 U	0.33 U	0.33 U	0.33 U	6.6 U
Chloroform	0.33 U	13 U	13 U	0.33 U	0.33 U	0.33 U	6.6 U
Chloromethane	0.3 U	5.6 U	5.6 U	0.29 J	0.14 U	0.3 U	6 U
cis-1,2-Dichloroethene	52	430	410	1.6	4.4	1100	690
cis-1,3-Dichloropropene	0.22 U	8.8 U	8.8 U	0.22 U	0.22 U	0.22 U	4.4 U
Dibromochloromethane	0.28 U	11 U	11 U	0.28 U	0.28 U	0.28 U	5.6 U
Ethylbenzene	0.25 U	10 U	10 U	0.25 U	0.25 U	0.25 U	5 U
m,p-Xylenes	0.52 U	15 U	15 U	0.38 U	0.38 U	0.52 U	10 U
Methylene chloride	0.88 J,L	13 U	13 U	0.33 U	0.33 U	0.48 U	9.6 U
o-Xylene	0.24 U	9.6 U	9.6 U	0.24 U	0.24 U	0.24 U	4.8 U
Tetrachloroethene	0.32 U	13 U	13 U	0.32 U	0.32 U	0.32 U	6.4 U
Toluene	0.36 U	20 U	20 U	0.49 U	0.49 U	0.36 U	7.2 U
trans-1,2-Dichloroethene	7.6	11 U	11 U	0.27 U	0.27 U	13	18 J
trans-1,3-Dichloropropene	0.24 U	9.6 U	9.6 U	0.24 U	0.24 U	0.24 U	4.8 U
Trichloroethene	4.4	7600	7300	0.29 J	12	47	2000
Trichlorofluoromethane	0.34 U	14 U	14 U	0.34 U	0.34 U	0.34 U	6.8 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	48 U	48 U	1.2 U	1.2 U	1.2 U	24 U
Vinyl chloride	2.6	7.6 U	7.6 U	0.19 U	0.19 U	2.9	5.2 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-09A	WS-09A	WS-12	WS-13	OS-02	OS-04	OS-08
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	12/03/03	12/03/03	08/13/03	08/20/03	01/31/03	08/08/03	01/31/03
Sample Type	Dup	Split	Primary	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	---	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	6 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	4.8 U	0.4 U	0.24 U	0.24 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	6 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	5.4 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	6.4 U	0.3 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	6.4 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	5.6 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	7 U	0.4 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	7 U	0.2 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	7.4 U	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	0.336 U	0.297 U	---	---	---
2-Butanone	76 U	7 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	0.3 U	---	---	---	---	---
2-Hexanone	52 U	0.7 U	2.6 U	2.6 U	2.5 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	50 U	0.2 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	90 U	3 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	5.6 U	0.1 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	6 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	6.4 U	0.4 U	0.32 U	0.32 U	0.25 U	0.32 U	0.25 U
Bromomethane	6.8 U	0.5 U	0.34 U	0.34 U	0.2 U	0.99 U	0.2 U
Carbon disulfide	9.6 U	0.2 U	0.48 U	0.48 U	0.33 U	0.48 U	0.33 U
Carbon tetrachloride	5.6 U	0.3 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	7.2 U	0.1 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	6.6 U	0.3 U	0.33 U	0.33 U	0.33 U	0.91 U	0.33 U
Chloroform	6.6 U	0.2 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	6 U	0.4 U	0.3 U	0.3 U	0.14 U	0.27 U	0.14 U
cis-1,2-Dichloroethene	700	530	14	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	4.4 U	0.2 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	5.6 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	5 U	0.2 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	10 U	0.3 U	0.52 U	0.52 U	0.38 U	0.52 U	0.38 U
Methylene chloride	9.6 U	3 U	0.62 U	0.48 U	6.8 J,L	0.48 U	7 U
o-Xylene	4.8 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	6.4 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	7.2 U	0.2 U	0.36 U	0.36 U	0.49 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	18 J	12	1.1	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	4.8 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	2000	1300	16	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	6.8 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	24 U	0.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	5.2 U	0.2 U	0.26 U	0.26 U	0.19 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	AMA	DMA	DMA	DMA	DMA	DMA

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	OS-09	OS-09	OS-09	OS-16	OS-17	OS-21	OS-24
FLUTe Sample Port	---	---	---	---	---	---	Z15
Sample Date	11/06/03	11/06/03	11/06/03	01/30/03	02/25/03	09/03/03	01/28/03
Sample Type	Primary	Dup	Split	Primary	Primary	Primary	Primary
Sample Qualifier	---	---	---	---	pH	---	---
Compound (ug/l)							
1,1,1-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.24 U	0.24 U	0.4 U	0.29 U	0.29 U	0.24 U	0.29 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.2 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.3 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.4 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.2 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.2 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	---	---	---	---
2-Butanone	3.8 U	3.8 U	7 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	0.3 U	---	---	---	---
2-Hexanone	2.6 U	2.6 U	0.7 U	2.5 U	2.5 U	2.6 U	2.5 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	0.2 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	7.9 J,L	4.5 U	3 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.1 U	0.28 U	0.28 U	0.28 U	1.8
Bromodichloromethane	0.3 U	0.3 U	0.1 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.32 U	0.32 U	0.4 U	0.25 U	0.25 U	0.32 U	0.25 U
Bromomethane	0.34 U	0.34 U	0.5 U	0.2 U	0.2 U	0.34 U	0.2 U
Carbon disulfide	0.48 U	0.48 U	0.2 U	0.33 U	0.33 U	0.48 U	0.33 U
Carbon tetrachloride	0.28 U	0.28 U	0.3 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.1 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.3 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.2 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.3 U	0.3 U	0.4 U	0.14 U	0.14 U	0.3 U	0.14 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	2.2
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.2 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.2 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.2 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.52 U	0.52 U	0.3 U	0.38 U	0.38 U	0.52 U	0.38 U
Methylene chloride	0.48 U	0.48 U	3 U	0.64 U	0.33 U	0.48 U	0.47 J,L
o-Xylene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.2 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.36 U	0.36 U	0.2 U	0.49 U	0.49 U	0.36 U	0.49 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.2 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.2 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.2 U	0.26 U	0.26 U	0.26 U	3.6
Trichlorofluoromethane	0.34 U	0.34 U	0.1 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	0.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.26 U	0.26 U	0.2 U	0.19 U	0.19 U	0.26 U	0.19 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	AMA	DMA	DMA	DMA	DMA

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See last page of Table IV for footnotes and explanations.

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27-February-2004

TABLE IV
SUMMARY OF RESULTS FOR VOLATILE ORGANIC COMPOUNDS
IN CHATSWORTH FORMATION WELLS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	OS-26	OS-26	OS-26	OS-28	OS-28	OS-28
FLUTe Sample Port	---	---	---	---	---	---
Sample Date	02/04/03	02/04/03	12/02/03	08/22/03	08/22/03	09/18/03
Sample Type	Primary	Dup	Primary	Primary	Dup	Primary
Sample Qualifier	---	---	---	---	---	---
Compound (ug/l)						
1,1,1-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	0.29 U	0.29 U	0.24 U	0.24 U	0.24 U	0.24 U
1,1,2-Trichloroethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
1,1-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichlorobenzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
1,2-Dichloroethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,3-Dichlorobenzene	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U	0.35 U
1,4-Dichlorobenzene	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U	0.37 U
1,4-Dioxane	---	---	---	0.07 U	0.07 U	0.07 U
2-Butanone	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U
2-Chloroethyl Vinyl Ether	---	---	---	---	---	---
2-Hexanone	2.5 U	2.5 U	2.6 U	2.6 U	2.6 U	2.6 U
4-Methyl-2-pentanone (MIBK)	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U	2.5 U
Acetone	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U	4.5 U
Benzene	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U
Bromoform	0.25 U	0.25 U	0.32 U	0.32 U	0.32 U	0.32 U
Bromomethane	0.2 U	0.2 U	0.34 U	0.34 U	0.34 U	0.34 U
Carbon disulfide	0.33 U	0.33 U	0.48 U	0.48 U	0.48 U	0.48 U
Carbon tetrachloride	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Chloroethane	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloroform	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U
Chloromethane	0.14 U	0.14 U	0.3 U	0.3 U	0.3 U	0.3 U
cis-1,2-Dichloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
cis-1,3-Dichloropropene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U
Ethylbenzene	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
m,p-Xylenes	0.38 U	0.38 U	0.52 U	0.52 U	0.52 U	0.52 U
Methylene chloride	0.33 U	0.66 U	0.48 U	0.9 U	0.89 U	0.48 U
o-Xylene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Tetrachloroethene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U
Toluene	0.49 U	0.49 U	0.36 U	0.36 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U
trans-1,3-Dichloropropene	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U
Trichloroethene	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Trichlorofluoromethane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U
Vinyl chloride	0.19 U	0.19 U	0.26 U	0.26 U	0.26 U	0.26 U
Analytical Method	8260B	8260B	8260B	8260B	8260B	8260B
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA

Haley & Aldrich, Inc.

See last page of Table IV for footnotes and explanations.

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27-February-2004

TABLE IV
FOOTNOTES AND EXPLANATIONS

AMA	=	American Analytics of Chatsworth, California.
Ceimic	=	Ceimic Corporation of Narragansett, Rhode Island.
DMA	=	Del Mar Analytical of Irvine, California.
(---)	=	Analysis not performed.
Primary	=	Primary sample.
Dup	=	Sample duplicate.
Split	=	Sample split.
ug/l	=	Micrograms per liter.
C	=	Possible carry-over contaminant.
F	=	Sampled through multi-level FLUTe ports. Footnoted results are not representative of historic groundwater samples, and may have been introduced in the FLUTe samples by compressed nitrogen gas, electrical tape and/or FLUTe components.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
L	=	Laboratory contaminant.
S	=	Suspect result.
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range (see Appendix D for details).
Comp	=	Composite sample. The HAR-16 sample was composited at the laboratory from FLUTe ports 7 through 12. The RD-10 sample was composited at the laboratory from FLUTe ports 3, 6, and 9.
pH	=	pH of preserved sample did not meet the method preservation requirements.
HS	=	VOA vial contained headspace which may have resulted in the loss of volatile analytes.

Notes:

* Low-level 1,4-dioxane analyses were performed on primary samples by Ceimic Corporation and on split samples by Del Mar Analytical using modified EPA method 8260 SIM.

TABLE V

SUMMARY OF RESULTS FOR GASOLINE RANGE ORGANICS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Date	EPA Method Number	Gasoline Range Organics (C6-C12) (micrograms per liter)	Laboratory
SHALLOW WELLS				
HAR-11	02/27/03	8015	13 U	DMA
RS-30	05/01/03	8015	470	DMA
RS-31	05/01/03	8015	37 U	DMA
RS-32	02/25/03	8015	26 U	DMA
CHATSWORTH FORMATION WELLS				
RD-32	02/21/03	8015	8.8 U	DMA
RD-36B	02/12/03	8015	35 U	DMA
RD-36C	02/13/03	8015	14 U	DMA
RD-36D	02/13/03	8015	8.8 U	DMA
RD-37	02/14/03	8015	17 U	DMA
RD-38A	02/13/03	8015	39 U	DMA
RD-38B	02/13/03	8015	8.8 U	DMA
RD-50(Z2)	02/17/03	8015	150 F	DMA

FOOTNOTES AND EXPLANATIONS:

- U = Not detected; numerical value represents the Method Detection Limit for that compound.
- DMA = Del Mar Analytical of Irvine, California.
- Z = FLUTE sample port number.
- F = Sampled through multi-level FLUTE ports. Footnoted results are not representative of historic groundwater samples, and may have been introduced in the FLUTE samples by compressed nitrogen gas, electrical tape and/or FLUTE components.

TABLE VI
SUMMARY OF ANALYSES FOR
TRACE METAL CONSTITUENTS AND CYANIDE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier			RS-18	RD-15	RD-21	RD-21	RD-22	RD-22	RD-23	RD-23
FLUTe Sample Port			--	---	Z2	Z2	Z2	Z2	Z1	Z1
Sample Date			05/02/03	02/26/03	02/25/03	08/28/03	02/24/03	06/02/03	02/26/03	08/26/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL								
Antimony	ug/l	6	5.4	0.42 U	2.3	0.89 J	3.1	---	0.5 U	0.63 J
Arsenic	ug/l	50	0.75 U	0.29 U	33	4.3	320	35	25	5.2
Barium	ug/l	1000	85	49	52	47	49	---	33	28
Beryllium	ug/l	4	0.11 U	0.11 U	0.11 U	0.095 U	0.11 U	---	0.11 U	0.095 U
Cadmium	ug/l	5	0.087 J	0.03 U	0.03 U	0.018 U	0.03 U	---	0.046 J	0.018 U
Chromium	ug/l	50	0.41 J	0.98 U	0.26 U	0.13 U	0.21 U	---	0.84 U	0.68 U
Cobalt	ug/l	NA	8.8	1.9	0.38 J	0.28 J	0.78 J	---	0.33 J	0.3 J
Copper	ug/l	1000 SMCL	1.8 J	2	0.93 J	0.78 J	2.2	---	9.6	0.35 U
Iron	ug/l	300 SMCL	4 U	540	8 J	7.4 J	27	---	47 U	30 U
Lead	ug/l	15 ECAL	0.13 J	1.4	1.3	0.62 J	0.67 J	---	1.8	0.26 J
Manganese	ug/l	50 SMCL	0.81 J	110	33	14	57	---	15	73
Mercury	mg/l	0.002	0.000063 U	0.000063 U	0.000063 U	0.000063 U	0.000063 U	---	0.000063 U	0.000063 U
Molybdenum	ug/l	NA	3.1	1	1.9	1.9	2	---	2.1	1.9
Nickel	ug/l	100	60	3.8	0.4 J	0.13 U	4.4	---	3.1	0.6 J
Selenium	ug/l	50	1.5 J	0.61 J	3.4	2.5	1.3 J	---	0.59 U	0.43 J
Silver	ug/l	100 SMCL	0.054 U	0.054 U	0.054 U	0.08 U	0.054 U	---	0.054 U	0.08 U
Thallium	ug/l	2	0.092 U	0.092 U	0.092 U	0.13 U	0.12 J	---	0.092 U	0.13 U
Total Cyanide	ug/l	200	---	---	---	---	0.0042 U	---	---	---
Vanadium	ug/l	50 ACAL	2.3	0.39 U	2	1.1	1.4	---	0.39 U	0.45 J
Zinc	ug/l	5000 SMCL	3.7 J	1900	48	30	470	---	110	11 J
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE VI
SUMMARY OF ANALYSES FOR
TRACE METAL CONSTITUENTS AND CYANIDE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier			RD-33A	RD-33B	RD-33C	RD-34A	RD-34B	RD-34C	RD-54A	RD-54A
FLUTe Sample Port			Z4	---	---	---	---	---	Z2	Z2
Sample Date			01/30/03	02/11/03	02/10/03	05/16/03	02/06/03	02/06/03	02/18/03	08/26/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL								
Antimony	ug/l	6	3	0.74 J	0.11 J	0.54 U	0.29 J	0.032 U	0.57 J	0.4 J
Arsenic	ug/l	50	210	0.29 U	0.29 U	0.7 U	0.29 U	0.29 U	43	7.7
Barium	ug/l	1000	48	56	89	42	87	64	43	42
Beryllium	ug/l	4	0.11 U	0.11 U	0.11 U	0.078 U	0.11 U	0.11 U	0.11 U	0.095 U
Cadmium	ug/l	5	0.048 J	0.03 U	0.03 U	0.13 U	0.03 U	0.03 U	0.037 J	0.018 U
Chromium	ug/l	50	0.14 U	0.14 U	0.14 U	0.35 U	0.68 U	0.56 U	0.14 U	0.59 U
Cobalt	ug/l	NA	0.56 J	0.69 J	0.12 J	0.94 J	0.28 J	0.093 J	0.21 J	0.19 J
Copper	ug/l	1000 SMCL	3.8	0.38 U	0.52 J	3.7	0.57 J	0.51 J	3.3	0.35 U
Iron	ug/l	300 SMCL	4.7 J	1700	140	490	250	170	41 U	22 U
Lead	ug/l	15 ECAL	2.1	0.24 J	0.28 J	0.65 J	0.35 J	0.18 J	3	0.55 J
Manganese	ug/l	50 SMCL	15	140	32	35	47	12	16	230
Mercury	mg/l	0.002	0.00005 U	0.00005 U	0.00005 U	0.000063 U	0.00005 U	0.00005 U	0.000063 U	0.000063 U
Molybdenum	ug/l	NA	1.4	2.1	1.8	0.66 J	1	1.3	1.1	1.5
Nickel	ug/l	100	1.4	0.27 J	0.1 U	1.6	0.43 J	0.1 U	2.1	1.9
Selenium	ug/l	50	1 J	0.59 U	0.59 U	2.2	0.59 U	0.59 U	0.59 U	1.1 J
Silver	ug/l	100 SMCL	0.054 U	0.054 U	0.054 U	0.13 U	0.054 U	0.054 U	0.054 U	0.08 U
Thallium	ug/l	2	0.18 J	0.14 J	0.24 J	0.083 U	0.092 U	0.1 J	0.092 U	0.13 U
Total Cyanide	ug/l	200	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	---	---
Vanadium	ug/l	50 ACAL	1.2	0.77 U	0.83 U	0.7 U	0.39 U	0.39 U	0.39 U	0.53 J
Zinc	ug/l	5000 SMCL	630	910	210	2400	910	81	93	71
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE VI
SUMMARY OF ANALYSES FOR
TRACE METAL CONSTITUENTS AND CYANIDE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier			RD-54B	RD-54B	RD-54C	RD-54C	RD-56B	RD-57	RD-57	RD-59A
FLUTe Sample Port			---	---	---	---	---	Z8	Z8	---
Sample Date			02/26/03	08/07/03	02/26/03	08/26/03	08/12/03	01/29/03	04/30/03	01/31/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL								
Antimony	ug/l	6	0.45 U	0.52 U	0.92 U	0.2 U	0.3 J	0.84 J	1.1 J	4.1
Arsenic	ug/l	50	0.29 U	0.53 U	0.29 U	0.99 J	0.53 U	1.5	1.1 U	0.3 J
Barium	ug/l	1000	63	55	75	68	72	48	46	44
Beryllium	ug/l	4	0.11 U	0.095 U	0.11 U	0.095 U	0.095 U	0.11 U	0.11 U	0.11 U
Cadmium	ug/l	5	0.03 U	0.018 U	0.03 J	0.018 U	0.018 U	0.03 U	0.03 U	0.03 U
Chromium	ug/l	50	0.74 U	0.74 U	0.52 U	0.75 U	0.06 U	0.14 U	0.22 J	0.18 U
Cobalt	ug/l	NA	0.26 J	0.14 J	0.34 J	0.24 J	0.13 J	0.31 J	0.23 J	0.14 J
Copper	ug/l	1000 SMCL	0.73 J	0.37 J	0.76 J	1.3 J	0.85 J	0.38 U	0.38 J	3.1
Iron	ug/l	300 SMCL	1400	1300	1500	1400	200	110	79	18
Lead	ug/l	15 ECAL	1.1	1	9.8	4.1	1.7	0.13 U	0.13 U	0.71 J
Manganese	ug/l	50 SMCL	67	66	430	410	33	170	150	10
Mercury	mg/l	0.002	0.000063 U	0.000063 U	0.000063 U	0.000063 U	0.000063 U	0.00005 U	0.000063 U	0.00005 U
Molybdenum	ug/l	NA	1.8	1.6	7	6.8	1.5	1.3	1.5	1.6
Nickel	ug/l	100	1.3	0.13 U	3.1	0.84 J	0.13 U	0.21 J	0.1 U	0.48 J
Selenium	ug/l	50	0.81 J	0.43 J	0.59 U	0.72 J	0.65 J	0.59 U	0.59 U	0.59 U
Silver	ug/l	100 SMCL	0.054 U	0.08 U	0.054 U	0.08 U	0.08 U	0.054 U	0.054 U	0.054 U
Thallium	ug/l	2	0.092 U	0.13 U	0.14 J	0.13 U	0.13 U	0.096 J	0.092 U	0.092 U
Total Cyanide	ug/l	200	---	---	---	---	---	---	---	---
Vanadium	ug/l	50 ACAL	0.39 U	0.43 U	0.39 U	0.43 U	0.43 U	0.72 J	0.39 U	0.92 J
Zinc	ug/l	5000 SMCL	4400	1400	1700	1500	520	3.1 J	2.2 J	28
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA

TABLE VI
SUMMARY OF ANALYSES FOR
TRACE METAL CONSTITUENTS AND CYANIDE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier			RD-59A	RD-59B	RD-59B	RD-59C	RD-59C	OS-28
FLUTe Sample Port			---	---	---	---	---	---
Sample Date			08/08/03	01/31/03	08/08/03	01/31/03	08/08/03	08/22/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL						
Antimony	ug/l	6	0.49 U	0.22 U	0.49 U	0.032 U	0.44 U	0.31 J
Arsenic	ug/l	50	0.53 U	0.29 U	0.53 U	0.29 U	0.53 U	0.53 U
Barium	ug/l	1000	54	42	48	49	55	27
Beryllium	ug/l	4	0.095 U	0.11 U	0.095 U	0.11 U	0.095 U	0.095 U
Cadmium	ug/l	5	0.027 J	0.03 U	0.018 U	0.03 U	0.018 U	0.018 U
Chromium	ug/l	50	0.92 U	0.14 U	0.82 U	0.14 U	0.75 U	0.2 U
Cobalt	ug/l	NA	0.18 J	0.079 J	0.074 J	0.056 J	0.058 J	0.18 J
Copper	ug/l	1000 SMCL	3.2	1.5 J	0.81 J	1.2 J	0.83 J	0.44 U
Iron	ug/l	300 SMCL	43	56	69	14	14	100
Lead	ug/l	15 ECAL	1.1	1.2	0.41 J	1.2	0.6 J	0.13 U
Manganese	ug/l	50 SMCL	47	23	27	16	20	58
Mercury	mg/l	0.002	0.000063 U	0.00005 U	0.000063 U	0.00005 U	0.000063 U	0.000063 U
Molybdenum	ug/l	NA	1.4	1.4	1.6	1.2	1.4	1.2
Nickel	ug/l	100	0.16 J	0.1 U	0.13 U	0.1 U	0.13 U	0.13 U
Selenium	ug/l	50	0.42 J	0.59 U	0.34 U	0.59 U	0.34 U	0.4 J
Silver	ug/l	100 SMCL	0.08 U	0.054 U	0.08 U	0.054 U	0.08 U	0.08 U
Thallium	ug/l	2	0.17 J	0.092 U	0.13 U	0.092 U	0.13 U	0.13 U
Total Cyanide	ug/l	200	---	---	---	---	---	---
Vanadium	ug/l	50 ACAL	0.43 U	0.39 U	0.43 U	0.39 U	0.43 U	0.43 U
Zinc	ug/l	5000 SMCL	49	6.8 J	8.4 J	9.3 J	7.1 J	2.8 J
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA

TABLE VI
FOOTNOTES AND EXPLANATIONS

DMA	=	Del Mar Analytical of Irvine, California.
(---)	=	Analysis not performed.
Primary	=	Primary sample.
mg/l	=	Milligrams per liter.
ug/l	=	Micrograms per liter.
MCL	=	Maximum Contaminant Level, California primary drinking water standard (California Department of Health Services, 2003. http://www.dhs.ca.gov/ps/ddwem/publications/regulations/MCLrevisions6-12-03.pdf).
NA	=	Not available; no MCL promulgated.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
SMCL	=	Secondary drinking water MCL.
ECAL	=	Enforceable California Action Level to be met at a customer tap.
ACAL	=	Advisory California Action Level for unregulated chemical contaminants.
Z	=	FLUTe sample port number.

TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	SH-04	RS-08	HAR-14	HAR-15	RD-01	RD-02	RD-02
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	04/14/03	04/14/03	04/15/03	04/15/03	05/07/03	02/04/03	05/05/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
1,2,4-Trichlorobenzene	3.4 U	3.4 U	3.3 U	3.4 U	7.9 U	7.9 U	7.9 U
1,2-Dichlorobenzene	0.64 U	3.3 U	0.32 U	0.32 U	3.2 U	7 U	1.6 U
1,2-Diphenylhydrazine/Azobenzene	---	---	---	---	8.8 U	8.8 U	8.8 U
1,3-Dichlorobenzene	0.7 U	3 U	0.35 U	0.35 U	3.5 U	6.8 U	1.8 U
1,3-Dinitrobenzene	20 U	20 U	19 U	20 U	8.4 U	8.4 U	8.4 U
1,4-Dichlorobenzene	0.74 U	3.1 U	0.37 U	0.37 U	3.7 U	7.8 U	1.8 U
2,4,6-Trichlorophenol	4.5 U	4.4 U	4.4 U	4.5 U	6.5 U	6.5 U	6.5 U
2,4-Dichlorophenol	4.8 U	4.7 U	4.6 U	4.8 U	7.6 U	7.6 U	7.6 U
2,4-Dimethylphenol	6 U	5.9 U	5.8 U	6 U	7.5 U	7.5 U	7.5 U
2,4-Dinitrophenol	1.3 U	1.3 U	1.2 U	1.3 U	4.4 U	4.4 U	4.4 U
2,4-Dinitrotoluene	1.3 U	1.3 U	1.2 U	1.3 U	9.7 U	9.7 U	9.7 U
2,6-Dinitrotoluene	1.9 U	1.9 U	1.9 U	1.9 U	9.3 U	9.3 U	9.3 U
2-Chloronaphthalene	3 U	3 U	2.9 U	3 U	7.4 U	7.4 U	7.4 U
2-Chlorophenol	4.9 U	4.8 U	4.8 U	4.9 U	7.7 U	7.7 U	7.7 U
2-Methylnaphthalene	3.5 U	3.4 U	3.4 U	3.5 U	---	---	---
2-Methylphenol	5.3 U	5.2 U	5.1 U	5.3 U	---	---	---
2-Nitrophenol	4.8 U	4.7 U	4.6 U	4.8 U	9.5 U	9.5 U	9.5 U
3,3-Dichlorobenzidine	5 U	4.9 U	4.9 U	5 U	8.3 U	8.3 U	8.3 U
4,6-Dinitro-2-methylphenol	2.2 U	2.2 U	2.1 U	2.2 U	12 U	12 U	12 U
4-Bromophenyl phenyl ether	2.1 U	2 U	2 U	2.1 U	8.7 U	8.7 U	8.7 U
4-Chloro-3-methylphenol	4 U	4 U	3.9 U	4 U	6.8 U	6.8 U	6.8 U
4-Chlorophenyl phenyl ether	2.6 U	2.6 U	2.6 U	2.6 U	7.2 U	7.2 U	7.2 U
4-Methylphenol	4.5 U	4.4 U	4.4 U	4.5 U	---	---	---
4-Nitrophenol	1.7 U	1.7 U	1.6 U	1.7 U	9.9 U	9.9 U	9.9 U
Acenaphthene	2.6 U	2.6 U	2.6 U	2.6 U	7.1 U	7.1 U	7.1 U
Acenaphthylene	2.5 U	2.4 U	2.4 U	2.5 U	8.1 U	8.1 U	8.1 U
Anthracene	0.8 U	0.78 U	0.78 U	0.8 U	9 U	9 U	9 U
Benzidine	---	---	---	---	6.1 U	6.1 U	6.1 U
Benzo(b+k)fluoranthene(total)	1.8 U	1.7 U	1.7 U	1.8 U	---	---	---
Benzo(a)anthracene	0.53 U	0.52 U	0.51 U	0.53 U	9.7 U	9.7 U	9.7 U
Benzo(a)pyrene	0.97 U	0.95 U	0.94 U	0.97 U	7.7 U	7.7 U	7.7 U
Benzo(b)fluoranthene	---	---	---	---	6.2 U	6.2 U	6.2 U
Benzo(g,h,i)perylene	0.98 U	0.96 U	0.95 U	0.98 U	9 U	9 U	9 U
Benzo(k)fluoranthene	---	---	---	---	9.2 U	9.2 U	9.2 U
Bis(2-chloroethoxy)methane	3.6 U	3.6 U	3.5 U	3.6 U	8.1 U	8.1 U	8.1 U
Bis(2-chloroethyl)ether	3.6 U	3.5 U	3.5 U	3.6 U	7.9 U	7.9 U	7.9 U
Bis(2-chloroisopropyl)ether	4 U	4 U	3.9 U	4 U	8.2 U	8.2 U	8.2 U
Bis(2-ethylhexyl)phthalate	3.6 U	3.6 U	3.5 U	3.6 U	30 U	30 U	30 U
Butyl benzyl phthalate	0.91 U	0.89 U	0.88 U	0.91 U	9.2 U	9.2 U	9.2 U
Chrysene	0.96 U	0.94 U	0.93 U	0.96 U	7.6 U	7.6 U	7.6 U
Di-n-butyl phthalate	0.92 U	0.9 U	0.89 U	0.92 U	12 U	12 U	12 U
Di-n-octyl phthalate	0.93 U	0.91 U	0.9 U	0.93 U	11 U	11 U	11 U
Dibenz(a,h)anthracene	0.89 U	0.87 U	0.86 U	0.89 U	7.8 U	7.8 U	7.8 U
Diethyl phthalate	1.2 U	1.2 U	1.2 U	1.2 U	7.5 U	7.5 U	7.5 U
Dimethyl phthalate	1.9 U	1.8 U	1.8 U	1.9 U	7 U	7 U	7 U

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See last page of Table VII for footnotes and explanations.

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TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	SH-04	RS-08	HAR-14	HAR-15	RD-01	RD-02	RD-02
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	04/14/03	04/14/03	04/15/03	04/15/03	05/07/03	02/04/03	05/05/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
Fluoranthene	0.78 U	0.76 U	0.76 U	0.78 U	7.8 U	7.8 U	7.8 U
Fluorene	2.6 U	2.6 U	2.6 U	2.6 U	6.9 U	6.9 U	6.9 U
Hexachlorobenzene	1.7 U	1.7 U	1.7 U	1.7 U	8.8 U	8.8 U	8.8 U
Hexachlorobutadiene	3.1 U	3.1 U	3 U	3.1 U	5.7 U	5.7 U	5.7 U
Hexachloroethane	2.4 U	2.3 U	2.3 U	2.4 U	8.7 U	8.7 U	8.7 U
Indeno(1,2,3-cd)pyrene	0.78 U	0.76 U	0.76 U	0.78 U	9 U	9 U	9 U
Isophorone	3.2 U	3.2 U	3.1 U	3.2 U	7.9 U	7.9 U	7.9 U
N-Nitroso-di-n-propylamine	3.7 U	3.6 U	3.6 U	3.7 U	9 U	9 U	9 U
N-Nitrosodimethylamine	2.4 U	2.4 U	2.3 U	2.4 U	2.3 U	9.4 U	9.4 U
N-Nitrosodiphenylamine	2.8 U	2.7 U	2.7 U	2.8 U	4.4 U	4.4 U	4.4 U
Naphthalene	3.8 U	3.7 U	3.7 U	3.8 U	7.3 U	7.3 U	7.3 U
Nitrobenzene	3.3 U	3.2 U	3.2 U	3.3 U	9.6 U	9.6 U	9.6 U
Pentachlorophenol	0.165 U	0.165 U	0.165 U	0.165 U	19 U	19 U	19 U
Phenanthrene	1.4 U	1.4 U	1.4 U	1.4 U	9 U	9 U	9 U
Phenol	4 U	3.9 U	3.9 U	4 U	7.6 U	7.6 U	7.6 U
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA
Method	8270C	8270C	8270C	8270C	8270C	8270C	8270C

TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-02	RD-02	RD-04	RD-04	RD-04	RD-04	RD-10
FLUTe Sample Port	---	---	---	---	---	---	Comp
Sample Date	08/11/03	11/19/03	02/03/03	05/07/03	08/20/03	11/20/03	01/28/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
1,2,4-Trichlorobenzene	2.9 U	2.9 U	7.9 U	7.9 U	2.9 U	2.9 U	7.9 U
1,2-Dichlorobenzene	3.1 U	3.1 U	7 U	0.32 U	3.1 U	3.1 U	7 U
1,2-Diphenylhydrazine/Azobenzene	2.6 U	2.6 U	8.8 U	8.8 U	2.6 U	2.6 U	8.8 U
1,3-Dichlorobenzene	3.1 U	3.1 U	6.8 U	0.35 U	3.1 U	3.1 U	6.8 U
1,3-Dinitrobenzene	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
1,4-Dichlorobenzene	2.8 U	2.8 U	7.8 U	0.37 U	2.8 U	2.8 U	7.8 U
2,4,6-Trichlorophenol	2.4 U	2.4 U	6.5 U	6.5 U	2.4 U	2.4 U	6.5 U
2,4-Dichlorophenol	1.9 U	1.9 U	7.6 U	7.6 U	1.9 U	1.9 U	7.6 U
2,4-Dimethylphenol	3.3 U	3.3 U	7.5 U	7.5 U	3.3 U	3.3 U	7.5 U
2,4-Dinitrophenol	5.3 U	5.3 U	4.4 U	4.4 U	5.3 U	5.3 U	4.4 U
2,4-Dinitrotoluene	3.8 U	3.8 U	9.7 U	9.7 U	3.8 U	3.8 U	9.7 U
2,6-Dinitrotoluene	2.5 U	2.5 U	9.3 U	9.3 U	2.5 U	2.5 U	9.3 U
2-Chloronaphthalene	2 U	2 U	7.4 U	7.4 U	2 U	2 U	7.4 U
2-Chlorophenol	2.5 U	2.5 U	7.7 U	7.7 U	2.5 U	2.5 U	7.7 U
2-Methylnaphthalene	---	---	---	---	---	---	---
2-Methylphenol	---	---	---	---	---	---	---
2-Nitrophenol	3.6 U	3.6 U	9.5 U	9.5 U	3.6 U	3.6 U	9.5 U
3,3-Dichlorobenzidine	11 U	11 U	8.3 U	8.3 U	11 U	11 U	8.3 U
4,6-Dinitro-2-methylphenol	5.1 U	5.1 U	12 U	12 U	5.1 U	5.1 U	12 U
4-Bromophenyl phenyl ether	2.5 U	2.5 U	8.7 U	8.7 U	2.5 U	2.5 U	8.7 U
4-Chloro-3-methylphenol	3.5 U	3.5 U	6.8 U	6.8 U	3.5 U	3.5 U	6.8 U
4-Chlorophenyl phenyl ether	3 U	3 U	7.2 U	7.2 U	3 U	3 U	7.2 U
4-Methylphenol	---	---	---	---	---	---	---
4-Nitrophenol	5.1 U	5.1 U	9.9 U	9.9 U	5.1 U	5.1 U	9.9 U
Acenaphthene	2.2 U	2.2 U	7.1 U	7.1 U	2.2 U	2.2 U	7.1 U
Acenaphthylene	2.2 U	2.2 U	8.1 U	8.1 U	2.2 U	2.2 U	8.1 U
Anthracene	1.8 U	1.8 U	9 U	9 U	1.8 U	1.8 U	9 U
Benzidine	5.2 R	5.2 U	6.1 U	6.1 U	5.2 R	5.2 U	6.1 U
Benzo(b+k)fluoranthene(total)	---	---	---	---	---	---	---
Benzo(a)anthracene	2.1 U	2.1 U	9.7 U	9.7 U	2.1 U	2.1 U	9.7 U
Benzo(a)pyrene	1.9 U	1.9 U	7.7 U	7.7 U	1.9 U	1.9 U	7.7 U
Benzo(b)fluoranthene	2.7 U	2.7 U	6.2 U	6.2 U	2.7 U	2.7 U	6.2 U
Benzo(g,h,i)perylene	5.3 U	5.3 U	9 U	9 U	5.3 U	5.3 U	9 U
Benzo(k)fluoranthene	3.4 U	3.4 U	9.2 U	9.2 U	3.4 U	3.4 U	9.2 U
Bis(2-chloroethoxy)methane	2.2 U	2.2 U	8.1 U	8.1 U	2.2 U	2.2 U	8.1 U
Bis(2-chloroethyl)ether	2.1 U	2.1 U	7.9 U	7.9 U	2.1 U	2.1 U	7.9 U
Bis(2-chloroisopropyl)ether	2.5 U	2.5 UJ	8.2 U	8.2 U	2.5 U	2.5 UJ	8.2 U
Bis(2-ethylhexyl)phthalate	5.2 U	5.2 U	30 U	30 U	5.2 U	5.2 U	30 U
Butyl benzyl phthalate	3.3 U	3.3 U	9.2 U	9.2 U	3.3 U	3.3 U	9.2 U
Chrysene	2.5 U	2.5 U	7.6 U	7.6 U	2.5 U	2.5 U	7.6 U
Di-n-butyl phthalate	2.8 U	2.8 U	12 U	12 U	2.8 U	2.8 U	12 U
Di-n-octyl phthalate	4.7 U	4.7 U	11 U	11 U	4.7 U	4.7 U	11 U
Dibenz(a,h)anthracene	4.7 U	4.7 U	7.8 U	7.8 U	4.7 U	4.7 U	7.8 U
Diethyl phthalate	3.1 U	3.1 U	7.5 U	7.5 U	3.1 U	3.1 U	7.5 U
Dimethyl phthalate	2.4 U	2.4 U	7 U	7 U	2.4 U	2.4 U	7 U

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SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-02	RD-02	RD-04	RD-04	RD-04	RD-04	RD-10
FLUTe Sample Port	---	---	---	---	---	---	Comp
Sample Date	08/11/03	11/19/03	02/03/03	05/07/03	08/20/03	11/20/03	01/28/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
Fluoranthene	3.1 U	3.1 U	7.8 U	7.8 U	3.1 U	3.1 U	7.8 U
Fluorene	2.5 U	2.5 U	6.9 U	6.9 U	2.5 U	2.5 U	6.9 U
Hexachlorobenzene	2.5 U	2.5 U	8.8 U	8.8 U	2.5 U	2.5 U	8.8 U
Hexachlorobutadiene	3.9 U	3.9 U	5.7 U	5.7 U	3.9 U	3.9 U	5.7 U
Hexachloroethane	3.9 U	3.9 U	8.7 U	8.7 U	3.9 U	3.9 U	8.7 U
Indeno(1,2,3-cd)pyrene	5.4 U	5.4 U	9 U	9 U	5.4 U	5.4 U	9 U
Isophorone	3.4 U	3.4 U	7.9 U	7.9 U	3.4 U	3.4 U	7.9 U
N-Nitroso-di-n-propylamine	2.9 U	2.9 U	9 U	9 U	2.9 U	2.9 U	9 U
N-Nitrosodimethylamine	3 U	3 U	9.4 U	9.4 U	3 U	3 U	9.4 U
N-Nitrosodiphenylamine	2.3 U	2.3 U	4.4 U	4.4 U	2.3 U	2.3 U	4.4 U
Naphthalene	1.8 U	1.8 U	7.3 U	7.3 U	1.8 U	1.8 U	7.3 U
Nitrobenzene	2.7 U	2.7 U	9.6 U	9.6 U	2.7 U	2.7 U	9.6 U
Pentachlorophenol	3.2 U	3.2 U	19 U	19 U	3.2 U	3.2 U	19 U
Phenanthrene	1.8 U	1.8 U	9 U	9 U	1.8 U	1.8 U	9 U
Phenol	3 U	3 U	7.6 U	7.6 U	3 U	3 U	7.6 U
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA
Method	8270C	8270C	8270C	8270C	8270C	8270C	8270C

TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-10	RD-44	RD-44	RD-44	RD-49A	RD-49A	RD-49A
FLUTe Sample Port	Comp	---	---	---	---	---	---
Sample Date	04/30/03	02/04/03	05/06/03	08/11/03	02/04/03	05/07/03	08/11/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
1,2,4-Trichlorobenzene	7.9 U	7.9 U	7.9 U	2.9 U	7.9 U	7.9 U	2.9 U
1,2-Dichlorobenzene	7 U	7 U	0.32 U	3.1 U	7 U	7 U	3.1 U
1,2-Diphenylhydrazine/Azobenzene	8.8 U	8.8 U	8.8 U	2.6 U	8.8 U	8.8 U	2.6 U
1,3-Dichlorobenzene	6.8 U	6.8 U	0.35 U	3.1 U	6.8 U	6.8 U	3.1 U
1,3-Dinitrobenzene	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
1,4-Dichlorobenzene	7.8 U	7.8 U	0.37 U	2.8 U	7.8 U	7.8 U	2.8 U
2,4,6-Trichlorophenol	6.5 U	6.5 U	6.5 U	2.4 U	6.5 U	6.5 U	2.4 U
2,4-Dichlorophenol	7.6 U	7.6 U	7.6 U	1.9 U	7.6 U	7.6 U	1.9 U
2,4-Dimethylphenol	7.5 U	7.5 U	7.5 U	3.3 U	7.5 U	7.5 U	3.3 U
2,4-Dinitrophenol	4.4 U	4.4 U	4.4 U	5.3 U	4.4 U	4.4 U	5.3 U
2,4-Dinitrotoluene	9.7 U	9.7 U	9.7 U	3.8 U	9.7 U	9.7 U	3.8 U
2,6-Dinitrotoluene	9.3 U	9.3 U	9.3 U	2.5 U	9.3 U	9.3 U	2.5 U
2-Chloronaphthalene	7.4 U	7.4 U	7.4 U	2 U	7.4 U	7.4 U	2 U
2-Chlorophenol	7.7 U	7.7 U	7.7 U	2.5 U	7.7 U	7.7 U	2.5 U
2-Methylnaphthalene	---	---	---	---	---	---	---
2-Methylphenol	---	---	---	---	---	---	---
2-Nitrophenol	9.5 U	9.5 U	9.5 U	3.6 U	9.5 U	9.5 U	3.6 U
3,3-Dichlorobenzidine	8.3 U	8.3 U	8.3 U	11 U	8.3 U	8.3 U	11 U
4,6-Dinitro-2-methylphenol	12 U	12 U	12 U	5.1 U	12 U	12 U	5.1 U
4-Bromophenyl phenyl ether	8.7 U	8.7 U	8.7 U	2.5 U	8.7 U	8.7 U	2.5 U
4-Chloro-3-methylphenol	6.8 U	6.8 U	6.8 U	3.5 U	6.8 U	6.8 U	3.5 U
4-Chlorophenyl phenyl ether	7.2 U	7.2 U	7.2 U	3 U	7.2 U	7.2 U	3 U
4-Methylphenol	---	---	---	---	---	---	---
4-Nitrophenol	9.9 U	9.9 U	9.9 U	5.1 U	9.9 U	9.9 U	5.1 U
Acenaphthene	7.1 U	7.1 U	7.1 U	2.2 U	7.1 U	7.1 U	2.2 U
Acenaphthylene	8.1 U	8.1 U	8.1 U	2.2 U	8.1 U	8.1 U	2.2 U
Anthracene	9 U	9 U	9 U	1.8 U	9 U	9 U	1.8 U
Benzidine	6.1 R	6.1 U	6.1 U	5.2 R	6.1 U	6.1 U	5.2 R
Benzo(b+k)fluoranthene(total)	---	---	---	---	---	---	---
Benzo(a)anthracene	9.7 U	9.7 U	9.7 U	2.1 U	9.7 U	9.7 U	2.1 U
Benzo(a)pyrene	7.7 U	7.7 U	7.7 U	1.9 U	7.7 U	7.7 U	1.9 U
Benzo(b)fluoranthene	6.2 U	6.2 U	6.2 U	2.7 U	6.2 U	6.2 U	2.7 U
Benzo(g,h,i)perylene	9 U	9 U	9 U	5.3 U	9 U	9 U	5.3 U
Benzo(k)fluoranthene	9.2 U	9.2 U	9.2 U	3.4 U	9.2 U	9.2 U	3.4 U
Bis(2-chloroethoxy)methane	8.1 U	8.1 U	8.1 U	2.2 U	8.1 U	8.1 U	2.2 U
Bis(2-chloroethyl)ether	7.9 U	7.9 U	7.9 U	2.1 U	7.9 U	7.9 U	2.1 U
Bis(2-chloroisopropyl)ether	8.2 U	8.2 U	8.2 U	2.5 U	8.2 U	8.2 U	2.5 U
Bis(2-ethylhexyl)phthalate	30 U	30 U	30 U	5.2 U	30 U	30 U	7.8 J,L
Butyl benzyl phthalate	9.2 U	9.2 U	9.2 U	3.3 U	9.2 U	9.2 U	3.3 U
Chrysene	7.6 U	7.6 U	7.6 U	2.5 U	7.6 U	7.6 U	2.5 U
Di-n-butyl phthalate	12 U	12 U	12 U	2.8 U	12 U	12 U	2.8 U
Di-n-octyl phthalate	11 U	11 U	11 U	4.7 U	11 U	11 U	4.7 U
Dibenz(a,h)anthracene	7.8 U	7.8 U	7.8 U	4.7 U	7.8 U	7.8 U	4.7 U
Diethyl phthalate	7.5 UJ	7.5 U	7.5 UJ	3.1 U	7.5 U	7.5 U	3.1 U
Dimethyl phthalate	7 U	7 U	7 U	2.4 U	7 U	7 U	2.4 U

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SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-10	RD-44	RD-44	RD-44	RD-49A	RD-49A	RD-49A
FLUTe Sample Port	Comp	---	---	---	---	---	---
Sample Date	04/30/03	02/04/03	05/06/03	08/11/03	02/04/03	05/07/03	08/11/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
Fluoranthene	7.8 U	7.8 U	7.8 U	3.1 U	7.8 U	7.8 U	3.1 U
Fluorene	6.9 U	6.9 U	6.9 U	2.5 U	6.9 U	6.9 U	2.5 U
Hexachlorobenzene	8.8 U	8.8 U	8.8 U	2.5 U	8.8 U	8.8 U	2.5 U
Hexachlorobutadiene	5.7 U	5.7 U	5.7 U	3.9 U	5.7 U	5.7 U	3.9 U
Hexachloroethane	8.7 U	8.7 U	8.7 U	3.9 U	8.7 U	8.7 U	3.9 U
Indeno(1,2,3-cd)pyrene	9 U	9 U	9 U	5.4 U	9 U	9 U	5.4 U
Isophorone	7.9 U	7.9 U	7.9 U	3.4 U	7.9 U	7.9 U	3.4 U
N-Nitroso-di-n-propylamine	9 U	9 U	9 U	2.9 U	9 U	9 U	2.9 U
N-Nitrosodimethylamine	9.4 U	9.4 U	9.4 U	3 U	9.4 U	9.4 U	3 U
N-Nitrosodiphenylamine	4.4 U	4.4 U	4.4 U	2.3 U	4.4 U	4.4 U	2.3 U
Naphthalene	7.3 U	7.3 U	7.3 U	1.8 U	7.3 U	7.3 U	1.8 U
Nitrobenzene	9.6 U	9.6 U	9.6 U	2.7 U	9.6 U	9.6 U	2.7 U
Pentachlorophenol	19 U	19 U	19 U	3.2 U	19 U	19 U	3.2 U
Phenanthrene	9 U	9 U	9 U	1.8 U	9 U	9 U	1.8 U
Phenol	7.6 U	7.6 U	7.6 U	3 U	7.6 U	7.6 U	3 U
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA
Method	8270C	8270C	8270C	8270C	8270C	8270C	8270C

TABLE VII
SUMMARY OF ANALYSES FOR
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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49A	RD-49B	RD-49B	RD-49B	RD-49B	RD-49C	RD-49C
FLUTE Sample Port	---	---	---	---	---	---	---
Sample Date	11/18/03	02/03/03	05/06/03	08/11/03	11/17/03	02/04/03	05/06/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
1,2,4-Trichlorobenzene	2.9 U	7.9 U	7.9 U	2.9 U	2.9 U	7.9 U	7.9 U
1,2-Dichlorobenzene	3.1 U	7 U	0.64 U	3.1 U	3.1 U	7 U	0.32 U
1,2-Diphenylhydrazine/Azobenzene	2.6 U	8.8 U	8.8 U	2.6 U	2.6 U	8.8 U	8.8 U
1,3-Dichlorobenzene	3.1 U	6.8 U	0.7 U	3.1 U	3.1 U	6.8 U	0.35 U
1,3-Dinitrobenzene	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
1,4-Dichlorobenzene	2.8 U	7.8 U	0.74 U	2.8 U	2.8 U	7.8 U	0.37 U
2,4,6-Trichlorophenol	2.4 U	6.5 U	6.5 U	2.4 U	2.4 U	6.5 U	6.5 U
2,4-Dichlorophenol	1.9 U	7.6 U	7.6 U	1.9 U	1.9 U	7.6 U	7.6 U
2,4-Dimethylphenol	3.3 U	7.5 U	7.5 U	3.3 U	3.3 U	7.5 U	7.5 U
2,4-Dinitrophenol	5.3 U	4.4 U	4.4 U	5.3 U	5.3 U	4.4 U	4.4 U
2,4-Dinitrotoluene	3.8 U	9.7 U	9.7 U	3.8 U	3.8 U	9.7 U	9.7 U
2,6-Dinitrotoluene	2.5 U	9.3 U	9.3 U	2.5 U	2.5 U	9.3 U	9.3 U
2-Chloronaphthalene	2 U	7.4 U	7.4 U	2 U	2 U	7.4 U	7.4 U
2-Chlorophenol	2.5 U	7.7 U	7.7 U	2.5 U	2.5 U	7.7 U	7.7 U
2-Methylnaphthalene	---	---	---	---	---	---	---
2-Methylphenol	---	---	---	---	---	---	---
2-Nitrophenol	3.6 U	9.5 U	9.5 U	3.6 U	3.6 U	9.5 U	9.5 U
3,3-Dichlorobenzidine	11 U	8.3 U	8.3 U	11 U	11 U	8.3 U	8.3 U
4,6-Dinitro-2-methylphenol	5.1 U	12 U	12 U	5.1 U	5.1 U	12 U	12 U
4-Bromophenyl phenyl ether	2.5 U	8.7 U	8.7 U	2.5 U	2.5 U	8.7 U	8.7 U
4-Chloro-3-methylphenol	3.5 U	6.8 U	6.8 U	3.5 U	3.5 U	6.8 U	6.8 U
4-Chlorophenyl phenyl ether	3 U	7.2 U	7.2 U	3 U	3 U	7.2 U	7.2 U
4-Methylphenol	---	---	---	---	---	---	---
4-Nitrophenol	5.1 U	9.9 U	9.9 U	5.1 U	5.1 U	9.9 U	9.9 U
Acenaphthene	2.2 U	7.1 U	7.1 U	2.2 U	2.2 U	7.1 U	7.1 U
Acenaphthylene	2.2 U	8.1 U	8.1 U	2.2 U	2.2 U	8.1 U	8.1 U
Anthracene	1.8 U	9 U	9 U	1.8 U	1.8 U	9 U	9 U
Benidine	5.2 U	6.1 U	6.1 U	5.2 R	5.2 R	6.1 U	6.1 U
Benzo(b+k)fluoranthene(total)	---	---	---	---	---	---	---
Benzo(a)anthracene	2.1 U	9.7 U	9.7 U	2.1 U	2.1 U	9.7 U	9.7 U
Benzo(a)pyrene	1.9 U	7.7 U	7.7 U	1.9 U	1.9 U	7.7 U	7.7 U
Benzo(b)fluoranthene	2.7 U	6.2 U	6.2 U	2.7 U	2.7 U	6.2 U	6.2 U
Benzo(g,h,i)perylene	5.3 U	9 U	9 U	5.3 U	5.3 U	9 U	9 U
Benzo(k)fluoranthene	3.4 U	9.2 U	9.2 U	3.4 U	3.4 U	9.2 U	9.2 U
Bis(2-chloroethoxy)methane	2.2 U	8.1 U	8.1 U	2.2 U	2.2 U	8.1 U	8.1 U
Bis(2-chloroethyl)ether	2.1 U	7.9 U	7.9 U	2.1 U	2.1 U	7.9 U	7.9 U
Bis(2-chloroisopropyl)ether	2.5 UJ	8.2 U	8.2 U	2.5 U	2.5 U	8.2 U	8.2 U
Bis(2-ethylhexyl)phthalate	5.2 U	30 U	30 U	5.2 U	5.2 U	30 U	30 U
Butyl benzyl phthalate	3.3 U	9.2 U	9.2 U	3.3 U	3.3 U	9.2 U	9.2 U
Chrysene	2.5 U	7.6 U	7.6 U	2.5 U	2.5 U	7.6 U	7.6 U
Di-n-butyl phthalate	2.8 U	12 U	12 U	2.8 U	2.8 U	12 U	12 U
Di-n-octyl phthalate	4.7 U	11 U	11 U	4.7 U	4.7 U	11 U	11 U
Dibenz(a,h)anthracene	4.7 U	7.8 U	7.8 U	4.7 U	4.7 U	7.8 U	7.8 U
Diethyl phthalate	3.1 U	7.5 U	7.5 UJ	3.1 U	3.1 U	7.5 U	7.5 U
Dimethyl phthalate	2.4 U	7 U	7 U	2.4 U	2.4 U	7 U	7 U

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See last page of Table VII for footnotes and explanations.

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TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49A	RD-49B	RD-49B	RD-49B	RD-49B	RD-49C	RD-49C
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	11/18/03	02/03/03	05/06/03	08/11/03	11/17/03	02/04/03	05/06/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
Fluoranthene	3.1 U	7.8 U	7.8 U	3.1 U	3.1 U	7.8 U	7.8 U
Fluorene	2.5 U	6.9 U	6.9 U	2.5 U	2.5 U	6.9 U	6.9 U
Hexachlorobenzene	2.5 U	8.8 U	8.8 U	2.5 U	2.5 U	8.8 U	8.8 U
Hexachlorobutadiene	3.9 U	5.7 U	5.7 U	3.9 U	3.9 U	5.7 U	5.7 U
Hexachloroethane	3.9 U	8.7 U	8.7 U	3.9 U	3.9 U	8.7 U	8.7 U
Indeno(1,2,3-cd)pyrene	5.4 U	9 U	9 U	5.4 U	5.4 U	9 U	9 U
Isophorone	3.4 U	7.9 U	7.9 U	3.4 U	3.4 U	7.9 U	7.9 U
N-Nitroso-di-n-propylamine	2.9 U	9 U	9 U	2.9 U	2.9 U	9 U	9 U
N-Nitrosodimethylamine	3 U	9.4 U	9.4 U	3 U	3 U	9.4 U	9.4 U
N-Nitrosodiphenylamine	2.3 U	4.4 U	4.4 U	2.3 U	2.3 U	4.4 U	4.4 U
Naphthalene	1.8 U	7.3 U	7.3 U	1.8 U	1.8 U	7.3 U	7.3 U
Nitrobenzene	2.7 U	9.6 U	9.6 U	2.7 U	2.7 U	9.6 U	9.6 U
Pentachlorophenol	3.2 U	19 U	19 U	3.2 U	3.2 U	19 U	19 U
Phenanthrene	1.8 U	9 U	9 U	1.8 U	1.8 U	9 U	9 U
Phenol	3 U	7.6 U	7.6 U	3 U	3 U	7.6 U	7.6 U
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA
Method	8270C	8270C	8270C	8270C	8270C	8270C	8270C

TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49C	RD-49C	HAR-07	HAR-16	HAR-17	WS-05	WS-05
FLUTe Sample Port	---	---	---	Comp	---	---	---
Sample Date	08/19/03	11/18/03	04/16/03	04/17/03	04/16/03	02/04/03	05/05/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
1,2,4-Trichlorobenzene	2.9 U	2.9 U	3.3 U	3.3 U	3.3 U	7.9 U	7.9 U
1,2-Dichlorobenzene	3.1 U	3.1 U	3.3 U	3.3 U	0.32 U	7 U	0.32 U
1,2-Diphenylhydrazine/Azobenzene	2.6 U	2.6 U	---	---	---	8.8 U	8.8 U
1,3-Dichlorobenzene	3.1 U	3.1 U	3 U	3 U	0.35 U	6.8 U	0.35 U
1,3-Dinitrobenzene	8.4 U	8.4 U	19 U	19 U	19 U	8.4 U	8.4 U
1,4-Dichlorobenzene	2.8 U	2.8 U	3.1 U	3.1 U	0.37 U	7.8 U	0.37 U
2,4,6-Trichlorophenol	2.4 U	2.4 U	4.3 U	4.4 U	4.4 U	6.5 U	6.5 U
2,4-Dichlorophenol	1.9 U	1.9 U	4.6 U	4.6 U	4.6 U	7.6 U	7.6 U
2,4-Dimethylphenol	3.3 U	3.3 U	5.8 U	5.8 U	5.8 U	7.5 U	7.5 U
2,4-Dinitrophenol	5.3 U	5.3 U	1.2 U	1.2 U	1.2 U	4.4 U	4.4 U
2,4-Dinitrotoluene	3.8 U	3.8 U	1.2 U	1.2 U	1.2 U	9.7 U	9.7 U
2,6-Dinitrotoluene	2.5 U	2.5 U	1.8 U	1.9 U	1.9 U	9.3 U	9.3 U
2-Chloronaphthalene	2 U	2 U	2.9 U	2.9 U	2.9 U	7.4 U	7.4 U
2-Chlorophenol	2.5 U	2.5 U	4.7 U	4.8 U	4.8 U	7.7 U	7.7 U
2-Methylnaphthalene	---	---	3.4 U	3.4 U	3.4 U	---	---
2-Methylphenol	---	---	5.1 U	5.1 U	5.1 U	---	---
2-Nitrophenol	3.6 U	3.6 U	4.6 U	4.6 U	4.6 U	9.5 U	9.5 U
3,3-Dichlorobenzidine	11 U	11 U	4.8 U	4.9 U	4.9 U	8.3 U	8.3 U
4,6-Dinitro-2-methylphenol	5.1 U	5.1 U	2.1 U	2.1 U	2.1 U	12 U	12 U
4-Bromophenyl phenyl ether	2.5 U	2.5 U	2 U	2 U	2 U	8.7 U	8.7 U
4-Chloro-3-methylphenol	3.5 U	3.5 U	3.9 U	3.9 U	3.9 U	6.8 U	6.8 U
4-Chlorophenyl phenyl ether	3 U	3 U	2.5 U	2.6 U	2.6 U	7.2 U	7.2 U
4-Methylphenol	---	---	4.3 U	4.4 U	4.4 U	---	---
4-Nitrophenol	5.1 U	5.1 U	1.6 U	1.6 U	1.6 U	9.9 U	9.9 U
Acenaphthene	2.2 U	2.2 U	2.5 U	2.6 U	2.6 U	7.1 U	7.1 U
Acenaphthylene	2.2 U	2.2 U	2.4 U	2.4 U	2.4 U	8.1 U	8.1 U
Anthracene	1.8 U	1.8 U	0.77 U	0.78 U	0.78 U	9 U	9 U
Benzidine	5.2 U	5.2 U	---	---	---	6.1 U	6.1 U
Benzo(b+k)fluoranthene(total)	---	---	1.7 UJ	1.7 U	1.7 U	---	---
Benzo(a)anthracene	2.1 U	2.1 U	0.51 U	0.51 U	0.51 U	9.7 U	9.7 U
Benzo(a)pyrene	1.9 U	1.9 U	0.93 U	0.94 U	0.94 U	7.7 U	7.7 U
Benzo(b)fluoranthene	2.7 U	2.7 U	---	---	---	6.2 U	6.2 U
Benzo(g,h,i)perylene	5.3 U	5.3 U	0.94 U	0.95 U	0.95 U	9 U	9 U
Benzo(k)fluoranthene	3.4 U	3.4 U	---	---	---	9.2 U	9.2 U
Bis(2-chloroethoxy)methane	2.2 U	2.2 U	3.5 U	3.5 U	3.5 U	8.1 U	8.1 U
Bis(2-chloroethyl)ether	2.1 U	2.1 U	3.5 UJ	3.5 U	3.5 UJ	7.9 U	7.9 U
Bis(2-chloroisopropyl)ether	2.5 U	2.5 UJ	3.9 U	3.9 U	3.9 U	8.2 U	8.2 U
Bis(2-ethylhexyl)phthalate	5.2 U	5.2 U	3.5 U	3.5 U	3.5 UJ	30 U	30 U
Butyl benzyl phthalate	3.3 U	3.3 U	0.88 U	0.88 U	0.88 U	9.2 U	9.2 U
Chrysene	2.5 U	2.5 U	0.92 U	0.93 U	0.93 U	7.6 U	7.6 U
Di-n-butyl phthalate	2.8 U	2.8 U	0.88 U	0.89 U	0.89 U	12 U	12 U
Di-n-octyl phthalate	4.7 U	4.7 U	0.89 UJ	0.9 U	0.9 UJ	11 U	11 U
Dibenz(a,h)anthracene	4.7 U	4.7 U	0.86 U	0.86 U	0.86 U	7.8 U	7.8 U
Diethyl phthalate	3.1 U	3.1 U	1.2 U	1.2 U	1.2 U	7.5 U	7.5 UJ
Dimethyl phthalate	2.4 U	2.4 U	1.8 U	1.8 U	1.8 U	7 U	7 U

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TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	RD-49C	RD-49C	HAR-07	HAR-16	HAR-17	WS-05	WS-05
FLUTe Sample Port	---	---	---	Comp	---	---	---
Sample Date	08/19/03	11/18/03	04/16/03	04/17/03	04/16/03	02/04/03	05/05/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
Fluoranthene	3.1 U	3.1 U	0.75 U	0.76 U	0.76 U	7.8 U	7.8 U
Fluorene	2.5 U	2.5 U	2.5 U	2.6 U	2.6 U	6.9 U	6.9 U
Hexachlorobenzene	2.5 U	2.5 U	1.7 U	1.7 U	1.7 U	8.8 U	8.8 U
Hexachlorobutadiene	3.9 U	3.9 U	3 U	3 U	3 U	5.7 U	5.7 U
Hexachloroethane	3.9 U	3.9 U	2.3 U	2.3 U	2.3 U	8.7 U	8.7 U
Indeno(1,2,3-cd)pyrene	5.4 U	5.4 U	0.75 U	0.76 U	0.76 U	9 U	9 U
Isophorone	3.4 U	3.4 U	3.1 U	3.1 U	3.1 U	7.9 U	7.9 U
N-Nitroso-di-n-propylamine	2.9 U	2.9 U	3.5 U	3.6 U	3.6 U	9 U	9 U
N-Nitrosodimethylamine	3 U	3 U	2.3 U	26	2.3 U	9.4 U	9.4 U
N-Nitrosodiphenylamine	2.3 U	2.3 U	2.6 U	2.7 U	2.7 U	4.4 U	4.4 U
Naphthalene	1.8 U	1.8 U	3.7 U	3.7 U	3.7 U	7.3 U	7.3 U
Nitrobenzene	2.7 U	2.7 U	3.2 U	3.2 U	3.2 U	9.6 U	9.6 U
Pentachlorophenol	3.2 U	3.2 U	0.165 U	2.0 U	0.165 U	19 U	19 U
Phenanthrene	1.8 U	1.8 U	1.4 U	1.4 U	1.4 U	9 U	9 U
Phenol	3 U	3 U	3.8 U	3.9 U	3.9 U	7.6 U	7.6 U
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA
Method	8270C	8270C	8270C	8270C	8270C	8270C	8270C

TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-06	WS-06	WS-06	WS-06	WS-09	WS-09	WS-12
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/03/03	05/07/03	08/19/03	11/19/03	02/03/03	05/07/03	08/13/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
1,2,4-Trichlorobenzene	7.9 U	7.9 U	2.9 U	2.9 U	7.9 U	7.9 U	2.9 U
1,2-Dichlorobenzene	7 U	0.32 U	3.1 U	3.1 U	7 U	7 U	3.1 U
1,2-Diphenylhydrazine/Azobenzene	8.8 U	8.8 U	2.6 U	2.6 U	8.8 U	8.8 U	2.6 U
1,3-Dichlorobenzene	6.8 U	0.35 U	3.1 U	3.1 U	6.8 U	6.8 U	3.1 U
1,3-Dinitrobenzene	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
1,4-Dichlorobenzene	7.8 U	0.37 U	2.8 U	2.8 U	7.8 U	7.8 U	2.8 U
2,4,6-Trichlorophenol	6.5 U	6.5 U	2.4 U	2.4 U	6.5 U	6.5 U	2.4 U
2,4-Dichlorophenol	7.6 U	7.6 U	1.9 U	1.9 U	7.6 U	7.6 U	1.9 U
2,4-Dimethylphenol	7.5 U	7.5 U	3.3 U	3.3 U	7.5 U	7.5 U	3.3 U
2,4-Dinitrophenol	4.4 U	4.4 U	5.3 U	5.3 U	4.4 U	4.4 U	5.3 U
2,4-Dinitrotoluene	9.7 U	9.7 U	3.8 U	3.8 U	9.7 U	9.7 U	3.8 U
2,6-Dinitrotoluene	9.3 U	9.3 U	2.5 U	2.5 U	9.3 U	9.3 U	2.5 U
2-Chloronaphthalene	7.4 U	7.4 U	2 U	2 U	7.4 U	7.4 U	2 U
2-Chlorophenol	7.7 U	7.7 U	2.5 U	2.5 U	7.7 U	7.7 U	2.5 U
2-Methylnaphthalene	---	---	---	---	---	---	---
2-Methylphenol	---	---	---	---	---	---	---
2-Nitrophenol	9.5 U	9.5 U	3.6 U	3.6 U	9.5 U	9.5 U	3.6 U
3,3-Dichlorobenzidine	8.3 U	8.3 U	11 U	11 U	8.3 U	8.3 U	11 U
4,6-Dinitro-2-methylphenol	12 U	12 U	5.1 U	5.1 U	12 U	12 U	5.1 U
4-Bromophenyl phenyl ether	8.7 U	8.7 U	2.5 U	2.5 U	8.7 U	8.7 U	2.5 U
4-Chloro-3-methylphenol	6.8 U	6.8 U	3.5 U	3.5 U	6.8 U	6.8 U	3.5 U
4-Chlorophenyl phenyl ether	7.2 U	7.2 U	3 U	3 U	7.2 U	7.2 U	3 U
4-Methylphenol	---	---	---	---	---	---	---
4-Nitrophenol	9.9 U	9.9 U	5.1 U	5.1 U	9.9 U	9.9 U	5.1 U
Acenaphthene	7.1 U	7.1 U	2.2 U	2.2 U	7.1 U	7.1 U	2.2 U
Acenaphthylene	8.1 U	8.1 U	2.2 U	2.2 U	8.1 U	8.1 U	2.2 U
Anthracene	9 U	9 U	1.8 U	1.8 U	9 U	9 U	1.8 U
Benzidine	6.1 U	6.1 U	5.2 R	5.2 U	6.1 U	6.1 U	5.2 U
Benzo(b+k)fluoranthene(total)	---	---	---	---	---	---	---
Benzo(a)anthracene	9.7 U	9.7 U	2.1 U	2.1 U	9.7 U	9.7 U	2.1 U
Benzo(a)pyrene	7.7 U	7.7 U	1.9 U	1.9 U	7.7 U	7.7 U	1.9 U
Benzo(b)fluoranthene	6.2 U	6.2 U	2.7 U	2.7 U	6.2 U	6.2 U	2.7 U
Benzo(g,h,i)perylene	9 U	9 U	5.3 U	5.3 U	9 U	9 U	5.3 U
Benzo(k)fluoranthene	9.2 U	9.2 U	3.4 U	3.4 U	9.2 U	9.2 U	3.4 U
Bis(2-chloroethoxy)methane	8.1 U	8.1 U	2.2 U	2.2 U	8.1 U	8.1 U	2.2 U
Bis(2-chloroethyl)ether	7.9 U	7.9 U	2.1 U	2.1 U	7.9 U	7.9 U	2.1 U
Bis(2-chloroisopropyl)ether	8.2 U	8.2 U	2.5 U	2.5 UJ	8.2 U	8.2 U	2.5 U
Bis(2-ethylhexyl)phthalate	30 U	30 U	5.2 U	5.2 U	30 U	30 U	5.2 U
Butyl benzyl phthalate	9.2 U	9.2 U	3.3 U	3.3 U	9.2 U	9.2 U	3.3 U
Chrysene	7.6 U	7.6 U	2.5 U	2.5 U	7.6 U	7.6 U	2.5 U
Di-n-butyl phthalate	12 U	12 U	2.8 U	2.8 U	12 U	12 U	2.8 U
Di-n-octyl phthalate	11 U	11 U	4.7 U	4.7 U	11 U	11 U	4.7 U
Dibenz(a,h)anthracene	7.8 U	7.8 U	4.7 U	4.7 U	7.8 U	7.8 U	4.7 U
Diethyl phthalate	7.5 U	7.5 U	3.1 U	3.1 U	7.5 U	7.5 U	3.1 U
Dimethyl phthalate	7 U	7 U	2.4 U	2.4 U	7 U	7 U	2.4 U

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See last page of Table VII for footnotes and explanations.

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SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-06	WS-06	WS-06	WS-06	WS-09	WS-09	WS-12
FLUTe Sample Port	---	---	---	---	---	---	---
Sample Date	02/03/03	05/07/03	08/19/03	11/19/03	02/03/03	05/07/03	08/13/03
Sample Type	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound (ug/l)							
Fluoranthene	7.8 U	7.8 U	3.1 U	3.1 U	7.8 U	7.8 U	3.1 U
Fluorene	6.9 U	6.9 U	2.5 U	2.5 U	6.9 U	6.9 U	2.5 U
Hexachlorobenzene	8.8 U	8.8 U	2.5 U	2.5 U	8.8 U	8.8 U	2.5 U
Hexachlorobutadiene	5.7 U	5.7 U	3.9 U	3.9 U	5.7 U	5.7 U	3.9 U
Hexachloroethane	8.7 U	8.7 U	3.9 U	3.9 U	8.7 U	8.7 U	3.9 U
Indeno(1,2,3-cd)pyrene	9 U	9 U	5.4 U	5.4 U	9 U	9 U	5.4 U
Isophorone	7.9 U	7.9 U	3.4 U	3.4 U	7.9 U	7.9 U	3.4 U
N-Nitroso-di-n-propylamine	9 U	9 U	2.9 U	2.9 U	9 U	9 U	2.9 U
N-Nitrosodimethylamine	9.4 U	9.4 U	3 U	3 U	9.4 U	9.4 U	3 U
N-Nitrosodiphenylamine	4.4 U	4.4 U	2.3 U	2.3 U	4.4 U	4.4 U	2.3 U
Naphthalene	7.3 U	7.3 U	1.8 U	1.8 U	7.3 U	7.3 U	1.8 U
Nitrobenzene	9.6 U	9.6 U	2.7 U	2.7 U	9.6 U	9.6 U	2.7 U
Pentachlorophenol	19 U	19 U	3.2 U	3.2 U	19 U	19 U	3.2 U
Phenanthrene	9 U	9 U	1.8 U	1.8 U	9 U	9 U	1.8 U
Phenol	7.6 U	7.6 U	3 U	3 U	7.6 U	7.6 U	3 U
Laboratory	DMA	DMA	DMA	DMA	DMA	DMA	DMA
Method	8270C	8270C	8270C	8270C	8270C	8270C	8270C

TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-13	OS-28	OS-28
FLUTe Sample Port	---	---	---
Sample Date	08/20/03	08/22/03	09/18/03
Sample Type	Primary	Primary	Primary
Compound (ug/l)			
1,2,4-Trichlorobenzene	2.9 U	2.9 U	2.9 U
1,2-Dichlorobenzene	3.1 U	3.1 U	3.1 U
1,2-Diphenylhydrazine/Azobenzene	2.6 U	2.6 U	2.6 U
1,3-Dichlorobenzene	3.1 U	3.1 U	3.1 U
1,3-Dinitrobenzene	8.4 U	8.4 U	8.4 U
1,4-Dichlorobenzene	2.8 U	2.8 U	2.8 U
2,4,6-Trichlorophenol	2.4 U	2.4 U	2.4 U
2,4-Dichlorophenol	1.9 U	1.9 U	1.9 U
2,4-Dimethylphenol	3.3 U	3.3 U	3.3 U
2,4-Dinitrophenol	5.3 U	5.3 U	5.3 U
2,4-Dinitrotoluene	3.8 U	3.8 U	3.8 U
2,6-Dinitrotoluene	2.5 U	2.5 U	2.5 U
2-Chloronaphthalene	2 U	2 U	2 U
2-Chlorophenol	2.5 U	2.5 U	2.5 U
2-Methylnaphthalene	---	---	---
2-Methylphenol	---	---	---
2-Nitrophenol	3.6 U	3.6 U	3.6 U
3,3-Dichlorobenzidine	11 U	11 U	11 U
4,6-Dinitro-2-methylphenol	5.1 U	5.1 U	5.1 U
4-Bromophenyl phenyl ether	2.5 U	2.5 U	2.5 U
4-Chloro-3-methylphenol	3.5 U	3.5 U	3.5 U
4-Chlorophenyl phenyl ether	3 U	3 U	3 U
4-Methylphenol	---	---	---
4-Nitrophenol	5.1 U	5.1 U	5.1 U
Acenaphthene	2.2 U	2.2 U	2.2 U
Acenaphthylene	2.2 U	2.2 U	2.2 U
Anthracene	1.8 U	1.8 U	1.8 U
Benzidine	5.2 R	5.2 R	5.2 U
Benzo(b+k)fluoranthene(total)	---	---	---
Benzo(a)anthracene	2.1 U	2.1 U	2.1 U
Benzo(a)pyrene	1.9 U	1.9 U	1.9 U
Benzo(b)fluoranthene	2.7 U	2.7 U	2.7 U
Benzo(g,h,i)perylene	5.3 U	5.3 U	5.3 U
Benzo(k)fluoranthene	3.4 U	3.4 U	3.4 U
Bis(2-chloroethoxy)methane	2.2 U	2.2 U	2.2 U
Bis(2-chloroethyl)ether	2.1 U	2.1 U	2.1 U
Bis(2-chloroisopropyl)ether	2.5 U	2.5 U	2.5 U
Bis(2-ethylhexyl)phthalate	5.2 U	6.2 J,L	5.2 U
Butyl benzyl phthalate	3.3 U	3.3 U	3.3 U
Chrysene	2.5 U	2.5 U	2.5 U
Di-n-butyl phthalate	2.8 U	2.8 U	2.8 U
Di-n-octyl phthalate	4.7 U	4.7 U	4.7 U
Dibenz(a,h)anthracene	4.7 U	4.7 U	4.7 U
Diethyl phthalate	3.1 U	3.1 U	3.1 U
Dimethyl phthalate	2.4 U	2.4 U	2.4 U

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See last page of Table VII for footnotes and explanations.

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TABLE VII
SUMMARY OF ANALYSES FOR
SEMI-VOLATILE ORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	WS-13	OS-28	OS-28
FLUTe Sample Port	---	---	---
Sample Date	08/20/03	08/22/03	09/18/03
Sample Type	Primary	Primary	Primary
Compound (ug/l)			
Fluoranthene	3.1 U	3.1 U	3.1 U
Fluorene	2.5 U	2.5 U	2.5 U
Hexachlorobenzene	2.5 U	2.5 U	2.5 U
Hexachlorobutadiene	3.9 U	3.9 U	3.9 U
Hexachloroethane	3.9 U	3.9 U	3.9 U
Indeno(1,2,3-cd)pyrene	5.4 U	5.4 U	5.4 U
Isophorone	3.4 U	3.4 U	3.4 U
N-Nitroso-di-n-propylamine	2.9 U	2.9 U	2.9 U
N-Nitrosodimethylamine	3 U	3 U	3 U
N-Nitrosodiphenylamine	2.3 U	2.3 U	2.3 U
Naphthalene	1.8 U	1.8 U	1.8 U
Nitrobenzene	2.7 U	2.7 U	2.7 U
Pentachlorophenol	3.2 U	3.2 U	3.2 U
Phenanthrene	1.8 U	1.8 U	1.8 U
Phenol	3 U	3 U	3 U
Laboratory	DMA	DMA	DMA
Method	8270C	8270C	8270C

TABLE VII
FOOTNOTES AND EXPLANATIONS

DMA	=	Del Mar Analytical of Irvine, California.
(---)	=	Analysis not performed.
Comp	=	Composite sample. RD-10 samples were composited from FLUTe ports 3, 6, and 9. HAR-16 samples were composited from FLUTe ports 7 through 12.
Primary	=	Primary sample.
ug/l	=	Micrograms per liter.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
L	=	Laboratory contaminant.
R	=	The analyte result was rejected; presence or absence of the analyte cannot be verified.
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range (see Appendix D for details).

TABLE VIII
SUMMARY OF ANALYSES FOR PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area	Sample Type	Sample Port	Sample Interval (feet below land surface)	Sample Date	Perchlorate (ug/l)	Laboratory
Shallow Wells							
SH-11	III	Primary	---	---	02/21/03	0.8 U	DMA
RS-07	I	Primary	---	---	02/21/03	0.8 U	DMA
RS-10	II	Primary	---	---	02/26/03	0.8 U	DMA
RS-11	IV	Primary	---	---	05/01/03	0.8 U	DMA
RS-13	II	Primary	---	---	02/21/03	0.8 U	DMA
RS-15	III	Primary	---	---	02/26/03	0.8 U	DMA
RS-17	III	Primary	---	---	02/26/03	0.8 U	DMA
RS-18	IV	Primary	---	---	05/02/03	0.8 U	DMA
RS-19	I	Primary	---	---	05/01/03	2.3 J	DMA
RS-25	IV	Primary	---	---	02/25/03	2.1 J	DMA
RS-25	IV	Primary	---	---	03/28/03	0.8 U	DMA
RS-25	IV	Dup	---	---	03/28/03	0.8 U	DMA
RS-25	IV	Split	---	---	03/28/03	1.546	Ceimic
RS-25	IV	Primary	---	---	05/01/03	0.8 U	DMA
RS-25	IV	Dup	---	---	05/01/03	0.8 U	DMA
RS-25	IV	Split	---	---	05/01/03	2 U	AMA
RS-30	I	Primary	---	---	05/01/03	0.8 U	DMA
ES-09	I	Primary	---	---	05/01/03	0.8 U	DMA
ES-10	I	Primary	---	---	05/01/03	0.8 U	DMA
ES-12	I	Primary	---	---	02/27/03	1.3 J	DMA
ES-31	IV	Primary	---	---	02/19/03	0.8 U	DMA
Near-Surface Groundwater Piezometers							
PZ-012	I	Primary	E	26.75 - 27.25	12/09/03	0.8 U	DMA
PZ-012	I	Primary	F	34.75 - 35.25	12/09/03	0.8 U	DMA
Chatsworth Formation Wells							
RD-01	I	Primary	---	---	05/07/03	0.8 U	DMA
RD-02	I	Primary	---	---	02/04/03	0.8 U	DMA
RD-02	I	Primary	---	---	05/05/03	0.8 U	DMA
RD-02	I	Primary	---	---	08/11/03	0.8 U	DMA
RD-02	I	Primary	---	---	11/19/03	0.8 U	DMA
RD-03	I	Primary	---	---	02/18/03	0.8 U	DMA
RD-04	II	Primary	---	---	02/03/03	0.8 U	DMA
RD-04	II	Primary	---	---	05/07/03	0.8 U	DMA
RD-04	II	Primary	---	---	08/20/03	0.8 U	DMA
RD-04	II	Primary	---	---	11/20/03	0.8 U	DMA
RD-10	I	Primary	3,6,9	Comp	01/28/03	160	DMA
RD-10	I	Primary	3,6,9	Comp	04/30/03	220	DMA
RD-14	IV	Primary	---	---	02/26/03	0.8 U	DMA
RD-15	IV	Primary	---	---	02/26/03	0.8 U	DMA
RD-17	IV	Primary	---	---	02/24/03	0.8 U	DMA
RD-18	IV	Primary	---	---	02/17/03	0.8 U	DMA
RD-19	IV	Primary	---	---	02/26/03	0.8 U	DMA
RD-20	IV	Primary	---	---	02/14/03	0.8 U	DMA
RD-24	IV	Primary	---	---	02/12/03	0.8 U	DMA
RD-25	IV	Primary	---	---	02/24/03	0.8 U	DMA
RD-26	II	Primary	---	---	05/15/03	0.8 U	DMA

See last page of Table VIII for footnotes and explanations.

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TABLE VIII
SUMMARY OF ANALYSES FOR PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area	Sample Type	Sample Port	Sample Interval (feet below land surface)	Sample Date	Perchlorate (ug/l)	Laboratory
RD-27	IV	Primary	---	---	02/21/03	0.8 U	DMA
RD-28	IV	Primary	---	---	02/24/03	0.8 U	DMA
RD-29	IV	Primary	---	---	05/13/03	0.8 U	DMA
RD-30	IV	Primary	---	---	02/07/03	0.8 U	DMA
RD-31	I	Primary	5	128-138	01/27/03	3.7 J	DMA
RD-31	I	Primary	6	148-158	01/27/03	0.8 U	DMA
RD-31	I	Primary	7	168-178	01/27/03	3.8 J	DMA
RD-32	Off-site, NE of Area I	Primary	---	---	02/21/03	0.8 U	DMA
RD-36B	Off-site, NE of Area I	Primary	---	---	02/12/03	0.8 U	DMA
RD-36C	Off-site, NE of Area I	Primary	---	---	02/13/03	0.8 U	DMA
RD-36D	Off-site, NE of Area I	Primary	---	---	02/13/03	0.8 U	DMA
RD-37	Off-site, NE of Area I	Primary	---	---	02/14/03	0.8 U	DMA
RD-38A	Off-site, NE of Area I	Primary	---	---	02/13/03	0.8 U	DMA
RD-38B	Off-site, NE of Area I	Primary	---	---	02/13/03	0.8 U	DMA
RD-39B	Off-site, NE of Area I	Primary	---	---	02/13/03	0.8 U	DMA
RD-40	II	Primary	---	---	05/08/03	0.8 U	DMA
RD-41A	II	Primary	---	---	02/06/03	0.8 U	DMA
RD-41B	II	Primary	---	---	02/06/03	0.8 U	DMA
RD-41C	II	Primary	---	---	02/06/03	0.8 U	DMA
RD-42	II	Primary	---	---	02/07/03	0.8 U	DMA
RD-43A	Off-site, Near Area I	Primary	---	---	02/17/03	0.8 U	DMA
RD-43B	Off-site, Near Area I	Primary	---	---	02/11/03	0.8 U	DMA
RD-43C	Off-site, Near Area I	Primary	---	---	02/17/03	0.8 U	DMA
RD-44	I	Primary	---	---	02/04/03	0.8 U	DMA
RD-44	I	Primary	---	---	05/06/03	0.8 U	DMA
RD-44	I	Primary	---	---	08/11/03	0.8 U	DMA
RD-46A	I	Primary	---	---	02/18/03	0.8 U	DMA
RD-47	I	Primary	---	---	02/06/03	0.8 U	DMA
RD-49A	II	Primary	---	---	02/04/03	0.8 U	DMA
RD-49A	II	Primary	---	---	05/07/03	0.8 U	DMA
RD-49A	II	Primary	---	---	08/11/03	0.8 U	DMA
RD-49A	II	Primary	---	---	11/18/03	0.8 U	DMA
RD-49B	II	Primary	---	---	02/03/03	0.8 U	DMA
RD-49B	II	Primary	---	---	05/06/03	0.8 U	DMA
RD-49B	II	Primary	---	---	08/11/03	0.8 U	DMA
RD-49B	II	Primary	---	---	11/17/03	0.8 U	DMA
RD-49C	II	Primary	---	---	02/04/03	0.8 U	DMA
RD-49C	II	Primary	---	---	05/06/03	0.8 U	DMA
RD-49C	II	Primary	---	---	08/19/03	0.8 U	DMA
RD-49C	II	Primary	---	---	11/18/03	0.8 U	DMA
RD-51B	II	Primary	---	---	02/12/03	0.8 U	DMA
RD-51B	II	Primary	---	---	11/06/03	0.8 U	DMA
RD-51B	II	Split	---	---	11/06/03	0.35 U	Ceimic
RD-51C	II	Primary	---	---	11/07/03	0.8 U	DMA
RD-51C	II	Split	---	---	11/07/03	0.35 U	Ceimic
RD-52B	I	Primary	---	---	02/11/03	0.8 U	DMA
RD-52B	I	Primary	---	---	11/18/03	0.8 U	DMA

See last page of Table VIII for footnotes and explanations.

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TABLE VIII
SUMMARY OF ANALYSES FOR PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area	Sample Type	Sample Port	Sample Interval (feet below land surface)	Sample Date	Perchlorate (ug/l)	Laboratory
RD-52C	I	Primary	---	---	11/19/03	0.8 U	DMA
RD-55A	III	Primary	---	---	02/13/03	0.8 U	DMA
RD-55B	III	Primary	---	---	02/19/03	0.8 U	DMA
RD-59A	Off-site, W of Area IV	Primary	---	---	01/31/03	1 U	DMA
RD-59A	Off-site, W of Area IV	Primary	---	---	05/15/03	0.8 U	DMA
RD-59A	Off-site, W of Area IV	Primary	---	---	08/08/03	0.8 U	DMA
RD-59A	Off-site, W of Area IV	Primary	---	---	11/14/03	0.8 U	DMA
RD-59B	Off-site, W of Area IV	Primary	---	---	01/31/03	1 U	DMA
RD-59B	Off-site, W of Area IV	Primary	---	---	08/08/03	0.8 U	DMA
RD-59B	Off-site, W of Area IV	Primary	---	---	12/04/03	0.8 U	DMA
RD-59C	Off-site, W of Area IV	Primary	---	---	01/31/03	1 U	DMA
RD-59C	Off-site, W of Area IV	Primary	---	---	08/08/03	0.8 U	DMA
RD-59C	Off-site, W of Area IV	Primary	---	---	12/04/03	0.8 U	DMA
RD-66	Off-site, NE of Area I	Primary	---	---	02/10/03	0.8 U	DMA
RD-68A	Off-site, N of Area III	Primary	---	---	02/04/03	0.8 U	DMA
RD-68A	Off-site, N of Area III	Primary	---	---	12/04/03	0.8 U	DMA
RD-68B	Off-site, N of Area III	Primary	---	---	02/04/03	0.8 U	DMA
RD-68B	Off-site, N of Area III	Primary	---	---	12/04/03	0.8 U	DMA
RD-71	Off-site, NE of Area I	Primary	---	---	02/10/03	0.8 U	DMA
HAR-01	I	Primary	10	103-108	01/27/03	63	DMA
HAR-05	II	Primary	---	---	02/21/03	0.8 U	DMA
HAR-06	II	Primary	---	---	02/21/03	0.8 U	DMA
HAR-07	II	Primary	---	---	04/16/03	0.8 U	DMA
HAR-17	II	Primary	---	---	04/16/03	0.8 U	DMA
HAR-18	III	Primary	---	---	05/16/03	0.8 U	DMA
HAR-21	II	Primary	---	---	02/27/03	0.8 U	DMA
HAR-22	II	Primary	---	---	02/26/03	0.8 U	DMA
HAR-23	III	Primary	---	---	02/27/03	0.8 U	DMA
HAR-25	I	Primary	---	---	02/27/03	150	DMA
HAR-26	III	Primary	---	---	05/15/03	0.8 U	DMA
WS-04A	I	Primary	---	---	12/03/03	0.8 U	DMA
WS-05	I	Primary	---	---	02/04/03	0.8 U	DMA
WS-05	I	Primary	---	---	05/05/03	0.8 U	DMA
WS-06	I	Primary	---	---	02/03/03	0.8 U	DMA
WS-06	I	Primary	---	---	05/07/03	0.8 U	DMA
WS-06	I	Primary	---	---	08/19/03	0.8 U	DMA
WS-06	I	Primary	---	---	11/19/03	0.8 U	DMA
WS-09	II	Primary	---	---	02/03/03	0.8 U	DMA
WS-09	II	Primary	---	---	05/07/03	0.8 U	DMA
WS-09B	II	Primary	---	---	11/06/03	0.8 U	DMA
WS-12	I	Primary	---	---	08/13/03	0.8 U	DMA
WS-13	II	Primary	---	---	08/20/03	0.8 U	DMA
OS-02	Off-site	Primary	---	---	01/31/03	1 U	DMA
OS-02	Off-site	Primary	---	---	12/09/03	0.8 U	DMA
OS-03	Off-site	Primary	---	---	01/31/03	1 U	DMA
OS-03	Off-site	Primary	---	---	12/09/03	0.8 U	DMA
OS-04	Off-site	Primary	---	---	08/08/03	0.8 U	DMA

See last page of Table VIII for footnotes and explanations.

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TABLE VIII
SUMMARY OF ANALYSES FOR PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area	Sample Type	Sample Port	Sample Interval (feet below land surface)	Sample Date	Perchlorate (ug/l)	Laboratory
OS-04	Off-site	Primary	---	---	12/09/03	0.8 U	DMA
OS-05	Off-site	Primary	---	---	01/31/03	1 U	DMA
OS-05	Off-site	Primary	---	---	12/09/03	0.8 U	DMA
OS-08	Off-site	Primary	---	---	01/31/03	1 U	DMA
OS-08	Off-site	Primary	---	---	12/09/03	0.8 U	DMA
OS-08	Off-site	Split	---	---	12/09/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	07/02/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	07/02/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	07/10/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	07/10/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	07/10/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	07/10/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	07/17/03	0.8 UJ	DMA
OS-09	Off-site	Dup	---	---	07/17/03	0.8 UJ	DMA
OS-09	Off-site	Split	---	---	07/17/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	07/17/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	07/24/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	07/24/03	0.8 UJ	DMA
OS-09	Off-site	Split	---	---	07/24/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	07/24/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	07/31/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	07/31/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	07/31/03	0.35 U	Ceimic
OS-09	Off-site	Split	---	---	07/31/03	2 UJ	AMA
OS-09	Off-site	Split Sample Dup	---	---	07/31/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	07/31/03	2 UJ	AMA
OS-09	Off-site	Primary	---	---	08/07/03	0.8 UJ	DMA
OS-09	Off-site	Dup	---	---	08/07/03	0.8 UJ	DMA
OS-09	Off-site	Split	---	---	08/07/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	08/07/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	08/12/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	08/12/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	08/12/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	08/12/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	08/21/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	08/21/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	08/21/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	08/21/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	08/28/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	08/28/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	08/28/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	08/28/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	09/04/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	09/04/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	09/04/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	09/04/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	09/11/03	0.8 U	DMA

See last page of Table VIII for footnotes and explanations.

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TABLE VIII

SUMMARY OF ANALYSES FOR PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area	Sample Type	Sample Port	Sample Interval (feet below land surface)	Sample Date	Perchlorate (ug/l)	Laboratory
OS-09	Off-site	Dup	---	---	09/11/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	09/11/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	09/11/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	09/18/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	09/18/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	09/18/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	09/18/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	09/25/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	09/25/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	09/25/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	09/25/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	10/02/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	10/02/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	10/02/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	10/02/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	11/06/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	11/06/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	11/06/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	11/06/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	11/13/03	0.8 U	DMA
OS-09	Off-site	Dup	---	---	11/13/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	11/13/03	0.35 U	Ceimic
OS-09	Off-site	Split Sample Dup	---	---	11/13/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	11/20/03	0.8 U	DMA
OS-09	Off-site	Primary	---	---	11/24/03	0.8 U	DMA
OS-09	Off-site	Primary	---	---	12/04/03	0.8 U	DMA
OS-09	Off-site	Split	---	---	12/04/03	0.35 U	Ceimic
OS-09	Off-site	Primary	---	---	12/11/03	0.8 U	DMA
OS-09	Off-site	Primary	---	---	12/18/03	0.8 U	DMA
OS-09	Off-site	Primary	---	---	12/23/03	0.8 UJ	DMA
OS-09	Off-site	Primary	---	---	12/30/03	0.8 U	DMA
OS-10	Off-site	Primary	---	---	01/31/03	1 U	DMA
OS-10	Off-site	Primary	---	---	12/09/03	0.8 U	DMA
OS-10	Off-site	Split	---	---	12/09/03	0.35 U	Ceimic
OS-16	Off-site	Primary	---	---	01/30/03	1 U	DMA
OS-17	Off-site	Primary	---	---	02/25/03	0.8 U	DMA
OS-21	Off-site	Primary	---	---	09/03/03	0.8 U	DMA
OS-21	Off-site	Primary	---	---	12/02/03	0.8 U	DMA
OS-21	Off-site	Split	---	---	12/02/03	0.35 U	Ceimic
OS-26	Off-site	Primary	---	---	02/04/03	0.8 U	DMA
OS-26	Off-site	Primary	---	---	12/02/03	0.8 U	DMA
OS-28	Off-site	Primary	---	---	08/22/03	0.8 U	DMA
OS-28	Off-site	Primary	---	---	09/18/03	0.8 U	DMA

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TABLE VIII
FOOTNOTES AND EXPLANATIONS

AMA	=	American Analytics of Chatsworth, California.
Ceimic	=	Ceimic Corporation of Narragansett, Rhode Island.
DMA	=	Del Mar Analytical of Irvine, California.
ug/l	=	micrograms per liter.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
U	=	Not detected; numerical value is the Detection Limit.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range (see Appendix D for details).
Primary	=	Primary sample.
Dup	=	Sample duplicate.
Split	=	Sample split.
Split Sample Dup	=	Sample duplicate analyzed by the split laboratory.
Comp	=	Composite sample. RD-10 sample was composited at the laboratory from FLUTe ports 3, 6, and 9.

FLUTe Sample Port	FLUTe Sample Interval (feet below land surface)
3	211-221
6	271-281
9	331-341

NOTE: Perchlorate analyzed by EPA method 314.0.

TABLE IX

SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	FLUTe Sample Port	Sample Type	Sample Date	EPA Method Number	Radionuclide	Result (pCi/l) Activity	Error	MDA
Shallow Wells								
RS-11	---	Primary	05/01/03	900.0	Gross Alpha	1.65 U	1.8	2.83
	---	Primary	05/01/03	900.0	Gross Beta	0.692 U	2.3	3.89
	---	Primary	05/01/03	906.0	Tritium	17.6 U	100	172
RS-18	---	Primary	05/02/03	900.0	Gross Alpha	29.1	9.1	4.92
	---	Primary	05/02/03	900.0	Gross Beta	17.8	6.0	6.32
	---	Primary	05/02/03	906.0	Tritium	68.7 U	110	177
RS-25	---	Primary	02/25/03	900.0	Gross Alpha	2.18 J	1.3	1.62
	---	Primary	02/25/03	900.0	Gross Beta	8.98	2.2	3.19
	---	Primary	02/25/03	906.0	Tritium	45.9 U	110	186
ES-31	---	Primary	02/19/03	900.0	Gross Alpha	2.33 U	2.2	2.73
	---	Primary	02/19/03	900.0	Gross Beta	3.64 J	1.9	2.80
	---	Primary	02/19/03	906.0	Tritium	21.1 U	110	191
Chatsworth Formation Wells								
RD-07	3	Primary	01/29/03	900.0	Gross Alpha	14.4	3.5	2.34
	3	Primary	01/29/03	900.0	Gross Beta	15.5	3.1	4.07
	3	Primary	01/29/03	906.0	Tritium	0 U	110	182
RD-07	13	Primary	08/28/03	900.0	Gross Alpha	6.82	2.9	2.19
	13	Primary	08/28/03	900.0	Gross Beta	9.29	3.2	3.72
	13	Primary	08/28/03	906.0	Tritium	-37.4 U	110	188
	13	Primary	08/28/03	903.1	Radium-226	0.289 J	0.035	0.016
	13	Primary	08/28/03	904.0	Radium-228	1.17	0.25	0.57
RD-15	---	Primary	02/26/03	900.0	Gross Alpha	5.24	3.1	3.69
	---	Primary	02/26/03	900.0	Gross Beta	14.4	4.6	6.44
	---	Primary	02/26/03	906.0	Tritium	68.7 U	120	194
RD-17	---	Primary	02/24/03	900.0	Gross Alpha	2.73 J	2.3	2.62
	---	Primary	02/24/03	900.0	Gross Beta	7.25	3.6	5.20
	---	Primary	02/24/03	906.0	Tritium	-52.5 U	110	188
RD-21	2	Primary	02/25/03	900.0	Gross Alpha	2.78 U	2.5	3.04
	2	Primary	02/25/03	900.0	Gross Beta	7.72	3.6	5.25
	2	Primary	02/25/03	906.0	Tritium	86.9	120	192
RD-22	2	Primary	02/24/03	900.0	Gross Alpha	2.97 J	1.4	1.55
	2	Primary	02/24/03	900.0	Gross Beta	9.22	1.9	2.55
	2	Primary	02/24/03	906.0	Tritium	16.5 U	110	192

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SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	FLUTe Sample Port	Sample Type	Sample Date	EPA Method Number	Radionuclide	Result (pCi/l) Activity	Error	MDA
RD-23	1	Primary	02/26/03	900.0	Gross Alpha	4.42	1.3	0.960
	1	Primary	02/26/03	900.0	Gross Beta	6.18	1.8	2.61
	1	Primary	02/26/03	906.0	Tritium	116 U	120	188
RD-24	---	Primary	02/12/03	900.0	Gross Alpha	2.83 J	1.4	1.51
	---	Primary	02/12/03	900.0	Gross Beta	6.67	1.3	1.80
	---	Primary	02/12/03	906.0	Tritium	257	120	193
RD-24	---	Primary	11/14/03	900.0	Gross Alpha	5.06	3.4	2.92
	---	Split	11/14/03	900.0	Gross Alpha	11.6	4.56	3.11
	---	Primary	11/14/03	900.0	Gross Beta	9.29	3.4	3.66
	---	Split	11/14/03	900.0	Gross Beta	13.3	4.16	5.91
	---	Primary	11/14/03	906.0	Tritium	185 U	120	194
	---	Split	11/14/03	906.0	Tritium	237	65	82.4
	---	Primary	11/14/03	903.1	Radium-226	0.654 J	0.075	0.029
	---	Split	11/14/03	903.1	Radium-226	1.15	0.338	0.255
	---	Primary	11/14/03	904.0	Radium-228	1.61	0.27	0.522
	---	Split	11/14/03	904.0	Radium-228	2.93 J	0.884	0.778
RD-25	---	Primary	02/24/03	900.0	Gross Alpha	3.92	1.4	1.39
	---	Primary	02/24/03	900.0	Gross Beta	9.12	1.9	2.69
	---	Primary	02/24/03	906.0	Tritium	-31.8 U	110	197
RD-25	---	Primary	11/13/03	900.0	Gross Alpha	7.21	4.2	3.51
	---	Primary	11/13/03	900.0	Gross Beta	7.19	2.6	2.92
	---	Primary	11/13/03	906.0	Tritium	9.52 U	120	197
	---	Primary	11/13/03	903.1	Radium-226	0.630 J	0.073	0.029
	---	Primary	11/13/03	904.0	Radium-228	0.971 J	0.21	0.440
RD-27	---	Primary	02/21/03	906.0	Tritium	29.8 U	110	193
RD-27	---	Primary	05/14/03	900.0	Gross Alpha	4.43	2.5	2.45
	---	Primary	05/14/03	900.0	Gross Beta	7.41	3.0	3.88
RD-27	---	Primary	11/14/03	900.0	Gross Alpha	1.68 U	1.7	2.12
	---	Split	11/14/03	900.0	Gross Alpha	4.91	2.29	1.95
	---	Primary	11/14/03	900.0	Gross Beta	6.79	2.3	2.56
	---	Split	11/14/03	900.0	Gross Beta	7.05	2.35	3.70
	---	Primary	11/14/03	906.0	Tritium	-11.2 U	110	194
	---	Split	11/14/03	906.0	Tritium	9.54 U	48.9	85.0

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SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	FLUTe Sample Port	Sample Type	Sample Date	EPA Method Number	Radionuclide	Result (pCi/l) Activity	Error	MDA
RD-28	---	Primary	02/24/03	900.0	Gross Alpha	11.9	4.7	4.57
	---	Primary	02/24/03	900.0	Gross Beta	12.0	3.9	5.33
	---	Primary	02/24/03	906.0	Tritium	756	130	184
RD-28	---	Primary	11/14/03	900.0	Gross Alpha	11.1	6.5	5.96
	---	Primary	11/14/03	900.0	Gross Beta	15.4	6.7	8.98
	---	Primary	11/14/03	906.0	Tritium	1430	210	197
	---	Primary	11/14/03	903.1	Radium-226	0.659 J	0.076	0.029
	---	Primary	11/14/03	904.0	Radium-228	1.32	0.27	0.560
RD-29	---	Primary	05/13/03	900.0	Gross Alpha	16.1	5.5	3.04
	---	Primary	05/13/03	900.0	Gross Beta	9.76	4.1	5.16
	---	Primary	05/13/03	906.0	Tritium	-12.4 U	100	174
RD-30	---	Primary	02/07/03	900.0	Gross Alpha	3.27	1.6	1.72
	---	Primary	02/07/03	900.0	Gross Beta	7.00	1.9	2.74
	---	Primary	02/07/03	906.0	Tritium	83.8 U	110	190
RD-30	---	Primary	11/14/03	900.0	Gross Alpha	8.30	4.4	3.19
	---	Primary	11/14/03	900.0	Gross Beta	13.9	4.2	3.81
	---	Primary	11/14/03	906.0	Tritium	-76.9 U	110	194
	---	Primary	11/14/03	903.1	Radium-226	0.235 J	0.045	0.025
	---	Primary	11/14/03	904.0	Radium-228	0.261 U	0.20	0.515
RD-33A	4	Primary	01/30/03	900.0	Gross Alpha	3.42	2.1	2.24
	4	Primary	01/30/03	900.0	Gross Beta	5.38	2.3	3.32
	4	Primary	01/30/03	906.0	Tritium	8.31 U	120	196
RD-33B	---	Primary	02/11/03	900.0	Gross Alpha	0.527 U	0.75	1.07
	---	Primary	02/11/03	900.0	Gross Beta	4.94	1.1	1.66
	---	Primary	02/11/03	906.0	Tritium	87.7 U	120	194
RD-33B	---	Primary	11/13/03	906.0	Tritium	52.0 U	120	199
RD-33C	---	Primary	02/10/03	900.0	Gross Alpha	0.201 U	1.5	2.63
	---	Primary	02/10/03	900.0	Gross Beta	5.34	2.0	2.78
	---	Primary	02/10/03	906.0	Tritium	73.1 U	120	201
RD-33C	---	Primary	11/13/03	906.0	Tritium	107 U	110	188
	---	Split	11/13/03	906.0	Tritium	-23.3 U	46.7	82.2
RD-34A	---	Primary	05/16/03	900.0	Gross Alpha	18.5	7.0	5.31
	---	Primary	05/16/03	900.0	Gross Beta	12.1	5.1	6.32
	---	Primary	05/16/03	906.0	Tritium	2420	300	175

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SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	FLUTe Sample Port	Sample Type	Sample Date	EPA Method Number	Radionuclide	Result (pCi/l) Activity	Error	MDA
RD-34B	---	Primary	02/06/03	900.0	Gross Alpha	2.37	2.0	2.75
	---	Primary	02/06/03	900.0	Gross Beta	6.78	2.3	3.32
	---	Primary	02/06/03	906.0	Tritium	171 U	110	182
RD-34B	---	Primary	11/13/03	906.0	Tritium	254	120	196
RD-34C	---	Primary	02/06/03	900.0	Gross Alpha	1.84 J	1.2	1.48
	---	Primary	02/06/03	900.0	Gross Beta	3.28 J	1.7	2.70
	---	Primary	02/06/03	906.0	Tritium	-78.4 U	110	184
RD-34C	---	Primary	11/13/03	906.0	Tritium	-33.1 U	110	190
RD-54A	2	Primary	02/18/03	900.0	Gross Alpha	5.39	1.8	2.06
	2	Primary	02/18/03	900.0	Gross Beta	9.08	2.6	4.04
	2	Primary	02/18/03	906.0	Tritium	10.7 U	110	194
RD-54A	---	Primary	08/26/03	906.0	Tritium	25.3 U	110	190
RD-54B	---	Primary	02/26/03	900.0	Gross Alpha	5.38	1.8	1.80
	---	Primary	02/26/03	900.0	Gross Beta	7.36	2.2	3.34
	---	Primary	02/26/03	906.0	Tritium	24.2 U	110	187
RD-54B	---	Primary	08/07/03	906.0	Tritium	-31.7 U	110	190
RD-54C	---	Primary	02/26/03	900.0	Gross Alpha	1.90 J	1.1	1.30
	---	Primary	02/26/03	900.0	Gross Beta	5.32	1.8	2.82
	---	Primary	02/26/03	906.0	Tritium	-79.1 U	110	188
RD-54C	---	Primary	08/26/03	906.0	Tritium	-12.4 U	110	186
RD-57	8	Primary	01/29/03	900.0	Gross Alpha	2.68 J	1.7	2.02
	8	Primary	01/29/03	900.0	Gross Beta	4.31	2.6	4.01
	8	Primary	01/29/03	906.0	Tritium	-57.7 U	110	187
RD-57	8	Primary	04/30/03	900.0	Gross Alpha	3.06	1.9	2.18
	8	Primary	04/30/03	900.0	Gross Beta	6.07	2.2	2.63
	8	Primary	04/30/03	906.0	Tritium	18.8 U	99	167
RD-57	8	Primary	08/27/03	906.0	Tritium	-24.8 U	110	186
RD-59A	---	Primary	01/31/03	900.0	Gross Alpha	1.81 U	1.8	2.12
	---	Primary	01/31/03	900.0	Gross Beta	4.95	2.4	3.56
	---	Primary	01/31/03	906.0	Tritium	23.9 U	110	187

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SUMMARY OF ANALYSES FOR GROSS ALPHA, GROSS BETA, RADIUM ISOTOPES, AND TRITIUM ACTIVITIES, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	FLUTE Sample Port	Sample Type	Sample Date	EPA Method Number	Radionuclide	Result (pCi/l) Activity	Error	MDA
RD-59A	---	Primary	05/15/03	900.0	Gross Alpha	3.55	2.0	2.54
	---	Split	05/15/03	900.0	Gross Alpha	3.53	1.94	2.54
	---	Primary	05/15/03	900.0	Gross Beta	7.58	2.8	3.36
	---	Split	05/15/03	900.0	Gross Beta	14.0	3.88	5.48
	---	Primary	05/15/03	906.0	Tritium	29.7 U	100	171
	---	Split	05/15/03	906.0	Tritium	-12.3 U	51.5	110
RD-59A	---	Primary	08/08/03	906.0	Tritium	-33.7 U	110	190
	---	Split	08/08/03	906.0	Tritium	17.1 U	49	86.9
RD-59A	---	Primary	11/14/03	906.0	Tritium	-82.5 U	110	199
	---	Split	11/14/03	906.0	Tritium	-8.74 U	46.3	83.2
RD-59B	---	Primary	01/31/03	900.0	Gross Alpha	1.52 U	1.8	2.45
	---	Primary	01/31/03	900.0	Gross Beta	3.58 J	2.2	3.41
	---	Primary	01/31/03	906.0	Tritium	-31.1 U	110	183
RD-59B	---	Primary	08/08/03	906.0	Tritium	-21.2 U	110	192
RD-59C	---	Primary	01/31/03	900.0	Gross Alpha	2.04 J	1.8	2.00
	---	Primary	01/31/03	900.0	Gross Beta	3.54 J	1.9	2.80
	---	Primary	01/31/03	906.0	Tritium	1.97 U	110	185
RD-59C	---	Primary	08/08/03	906.0	Tritium	50.7 U	110	190
RD-63	---	Primary	02/05/03	900.0	Gross Alpha	6.08	1.7	1.94
	---	Primary	02/05/03	900.0	Gross Beta	9.06	1.3	1.72
	---	Primary	02/05/03	906.0	Tritium	152 U	120	194
RD-64	6	Primary	01/29/03	900.0	Gross Alpha	3.90	2.2	2.28
	6	Primary	01/29/03	900.0	Gross Beta	6.68	2.1	2.81
	6	Primary	01/29/03	906.0	Tritium	21.3 U	110	182

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TABLE IX
FOOTNOTES AND EXPLANATIONS

MDA	=	Minimum detectable activity.
J	=	Result is less than contract-required MDA and greater than or equal to the MDA.
pCi/l	=	PicoCuries per liter.
Primary	=	Primary sample.
Split	=	Sample split.
U	=	The result is less than the MDA.

Primary sample analyses were performed by Eberline Services of Richmond, California.

Split sample analyses were performed by Severn Trent Laboratories of Richland, Washington.

Results are presented as the activity plus or minus the error. Any activity is reported by the laboratory.

Analytical results that are less than the procedure background value are shown as negative values.

Samples are filtered and acidified in the field with the exception of tritium.

TABLE X

SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier FLUTE Port Sample Type Sample Date Radionuclides (pCi/l)	RS-11 --- Primary 05/01/03		RS-18 --- Primary 05/02/03		RS-25 --- Primary 02/25/03		ES-31 --- Primary 02/19/03		RD-07 Z3 Primary 01/29/03		RD-15 --- Primary 02/26/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting												
Actinium-228	ND	5.61	ND	7.57	ND	7.20	ND	8.96	ND	6.45	ND	3.4
Bismuth-212	ND	8.51	ND	11.9	ND	12.2	ND	14.5	ND	9.40	ND	4.94
Bismuth-214	ND	2.49	ND	3.53	ND	3.1	ND	3.89	ND	2.78	ND	1.44
Cobalt-57	ND	0.84	ND	0.978	ND	1.31	ND	1.35	ND	0.797	ND	0.525
Cobalt-60	ND	1.48	ND	1.84	ND	1.66	ND	1.96	ND	1.38	ND	0.684
Cesium-134	ND	1.58	ND	1.97	ND	1.88	ND	2.16	ND	2.48	ND	0.661
Cesium-137	ND	1.17	ND	1.76	ND	1.64	ND	1.94	ND	1.47	ND	0.633
Potassium-40	ND	30.4	ND	44.9	ND	34.7	ND	41.3	ND	37.7	ND	14.4
Lead-210	ND	261	ND	90.1	ND	366	ND	429	ND	99.1	ND	177
Lead-212	ND	1.78	ND	2.33	ND	2.46	ND	2.68	ND	1.77	ND	0.888
Lead-214	ND	2.36	ND	3.09	ND	3.23	ND	3.77	ND	2.60	ND	1.35
Radium-226	ND	17.1	ND	32.5	ND	25.5	ND	29.8	ND	19.1	ND	11.1
Thorium-234	ND	34.7	ND	25.4	ND	51.0	ND	60.4	ND	20.9	ND	26.6
Thallium-208	ND	1.24	ND	1.66	ND	1.66	ND	2.01	ND	1.33	ND	0.677
Uranium-235	ND	6.58	ND	8.43	ND	9.81	ND	11.4	ND	6.09	ND	4.99
Isotopic Uranium and Thorium												
Thorium-228	---	---	-0.009U +/- 0.037	0.074	---	---	---	---	0.058 +/- 0.020	0.018	---	---
Thorium-230	---	---	0.018U +/- 0.046	0.104	---	---	---	---	0.029 +/- 0.047	0.108	---	---
Thorium-232	---	---	0.005U +/- 0.009	0.035	---	---	---	---	0.004 +/- 0.008	0.013	---	---
Uranium-233/234	---	---	20.3 +/- 1.2	0.076	1.98 +/- 0.16	0.038	---	---	14.7 +/- 0.51	0.064	2.86 +/- 0.20	0.043
Uranium-235	---	---	1.05 +/- 0.12	0.021	0.090 +/- 0.035	0.026	---	---	0.551 +/- 0.084	0.024	0.122 +/- 0.043	0.027
Uranium-238	---	---	19.3 +/- 1.1	0.073	2.02 +/- 0.16	0.035	---	---	11.8 +/- 0.44	0.060	2.71 +/- 0.19	0.036

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SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier FLUTE Port Sample Type Sample Date Radionuclides (pCi/l)	RD-17 --- Primary 02/24/03		RD-21 Z2 Primary 02/25/03		RD-22 Z2 Primary 02/24/03		RD-23 Z1 Primary 02/26/03		RD-24 --- Primary 02/12/03		RD-24 --- Primary 11/14/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting												
Actinium-228	ND	7.50	ND	10.2	ND	5.70	ND	12.4	ND	24.1	ND	33.3
Bismuth-212	ND	12.4	ND	14.4	ND	10.0	ND	20.9	ND	33.6	ND	50.0
Bismuth-214	ND	3.55	ND	4.60	ND	2.67	ND	5.48	ND	10.2	ND	23.2
Cobalt-57	ND	1.08	ND	1.34	ND	0.756	ND	1.74	ND	3.02	ND	3.93
Cobalt-60	ND	1.99	ND	2.21	ND	1.35	ND	2.97	ND	5.52	ND	7.69
Cesium-134	ND	3.27	ND	4.68	ND	1.60	ND	3.19	ND	8.20	ND	9.20
Cesium-137	ND	1.65	ND	2.24	ND	1.26	ND	2.80	ND	5.61	ND	6.76
Potassium-40	ND	40.9	ND	62.2	ND	16.5	ND	116	ND	137	ND	145
Lead-210	ND	335	ND	182	ND	249	ND	197	ND	353	ND	473
Lead-212	ND	2.43	ND	2.94	ND	1.83	ND	4.05	ND	6.48	ND	10.9
Lead-214	ND	3.30	ND	4.22	ND	2.41	ND	5.26	ND	9.65	ND	26.7
Radium-226	ND	24.1	ND	31.1	ND	19.5	ND	41.6	ND	71.1	ND	106
Thorium-234	ND	47.8	ND	33.9	ND	36.4	ND	61.6	ND	78.3	ND	189
Thallium-208	ND	1.74	ND	2.15	ND	2.88	ND	2.85	ND	4.85	ND	7.55
Uranium-235	ND	9.44	ND	10.3	ND	5.73	ND	15.5	ND	23.1	ND	35.3
Isotopic Uranium and Thorium												
Thorium-228	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-233/234	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	---	---	---	---	---	---	---	---	---	---	---	---

See last page of Table X for footnotes and explanations.

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SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier FLUTE Port Sample Type Sample Date Radionuclides (pCi/l)	RD-24 --- Split 11/14/03		RD-25 --- Primary 02/24/03		RD-25 --- Primary 11/13/03		RD-27 --- Primary 05/14/03		RD-27 --- Primary 11/14/03		RD-27 --- Split 11/14/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting												
Actinium-228	ND	13.0	ND	13.6	ND	56.7	ND	5.67	ND	71.6	ND	12.8
Bismuth-212	ND	38.8	ND	24.1	ND	85.6	ND	8.75	ND	112	ND	40.4
Bismuth-214	ND	6.86	ND	9.54	ND	49.2	ND	2.64	ND	32.4	ND	6.27
Cobalt-57	ND	12.5	ND	2.01	ND	7.96	ND	0.892	ND	7.16	ND	11.7
Cobalt-60	ND	3.31	ND	3.58	ND	12.7	ND	1.53	ND	14	ND	2.95
Cesium-134	ND	3.07	ND	3.70	ND	14.1	ND	2.83	ND	17.8	ND	3.30
Cesium-137	ND	2.67	ND	3.25	ND	10.8	ND	1.25	ND	13.1	ND	2.73
Potassium-40	ND	88.8	ND	88.1	ND	227	ND	30.1	ND	429	ND	77.1
Lead-210	---	---	ND	220	ND	2720	ND	238	ND	522	---	---
Lead-212	ND	3.39	ND	4.52	ND	18.8	ND	1.9	ND	20.8	ND	4.15
Lead-214	ND	5.78	ND	6.09	ND	23.3	ND	2.58	ND	27.6	ND	5.41
Radium-226	---	---	ND	46.1	ND	224	ND	18.8	ND	178	---	---
Thorium-234	ND	417	ND	70.4	ND	368	ND	37.6	ND	227	ND	475
Thallium-208	ND	2.74	ND	3.28	ND	12.8	ND	1.28	ND	15.4	ND	3.13
Uranium-235	ND	12.5	ND	17.5	ND	74.7	ND	7.2	ND	69.1	ND	11.7
Isotopic Uranium and Thorium												
Thorium-228	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-233/234	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	---	---	---	---	---	---	---	---	---	---	---	---

See last page of Table X for footnotes and explanations.

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SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
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Well Identifier FLUTE Port Sample Type Sample Date Radionuclides (pCi/l)	RD-28 --- Primary 02/24/03		RD-28 --- Primary 11/14/03		RD-29 --- Primary 05/13/03		RD-30 --- Primary 02/07/03		RD-30 --- Primary 11/14/03		RD-33A Z4 Primary 01/30/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting												
Actinium-228	ND	6.56	ND	46.9	ND	7	ND	57.3	ND	46.9	ND	9.02
Bismuth-212	ND	10.2	ND	74.2	ND	11.1	ND	104	ND	72.5	ND	15.0
Bismuth-214	ND	3.17	ND	58.2	ND	3.36	ND	25.4	ND	46.7	ND	4.01
Cobalt-57	ND	0.848	ND	6.60	ND	0.918	ND	6.98	ND	7.28	ND	1.40
Cobalt-60	ND	1.55	ND	10.8	ND	1.88	ND	15.1	ND	10.2	ND	1.98
Cesium-134	ND	1.69	ND	11.6	ND	1.88	ND	16.1	ND	12.2	ND	2.26
Cesium-137	ND	1.41	ND	10.1	ND	1.56	ND	12.5	ND	10.1	ND	1.98
Potassium-40	ND	39.9	ND	164	ND	42.2	ND	171	ND	321	ND	41.5
Lead-210	ND	97.6	ND	698	ND	102	ND	858	ND	2550	ND	452
Lead-212	ND	1.96	ND	24.3	ND	2.04	ND	18.3	ND	18.0	ND	2.80
Lead-214	ND	2.84	ND	18.6	ND	2.99	ND	22.8	ND	48.2	ND	3.91
Radium-226	ND	21.4	ND	135	ND	22.2	ND	182	ND	367	ND	31.4
Thorium-234	ND	23.7	ND	222	ND	24.1	ND	308	ND	341	ND	62.6
Thallium-208	ND	1.47	ND	10.7	ND	1.57	ND	12.9	ND	12.5	ND	2.07
Uranium-235	ND	7.16	ND	51.2	ND	7.2	ND	52.6	ND	66.8	ND	12.2
Isotopic Uranium and Thorium												
Thorium-228	0.044 +/- 0.031	0.042	---	---	---	---	---	---	---	---	---	---
Thorium-230	0.037 +/- 0.050	0.112	---	---	---	---	---	---	---	---	---	---
Thorium-232	0.016 +/- 0.012	0.024	---	---	---	---	---	---	---	---	---	---
Uranium-233/234	9.37 +/- 0.40	0.061	---	---	8.74 +/- 0.55	0.049	---	---	---	---	---	---
Uranium-235	0.409 +/- 0.078	0.027	---	---	0.366 +/- 0.069	0.021	---	---	---	---	---	---
Uranium-238	9.31 +/- 0.40	0.056	---	---	8.21 +/- 0.52	0.047	---	---	---	---	---	---

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SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier FLUTE Port Sample Type Sample Date Radionuclides (pCi/l)	RD-33B --- Primary 02/11/03		RD-33C --- Primary 02/10/03		RD-34A --- Primary 05/16/03		RD-34B --- Primary 02/06/03		RD-34C --- Primary 02/06/03		RD-54A Z2 Primary 02/18/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting												
Actinium-228	ND	13.3	ND	11.8	ND	4.11	ND	10.6	ND	9.17	ND	9.26
Bismuth-212	ND	21.6	ND	18.9	ND	7.08	ND	17.6	ND	13.5	ND	15.8
Bismuth-214	ND	8.56	ND	5.06	ND	1.88	ND	4.38	ND	3.93	ND	4.41
Cobalt-57	ND	1.86	ND	1.80	ND	0.496	ND	1.44	ND	1.11	ND	1.34
Cobalt-60	ND	3.13	ND	2.39	ND	1.05	ND	2.64	ND	2.10	ND	2.51
Cesium-134	ND	3.46	ND	2.80	ND	1.26	ND	2.67	ND	3.73	ND	2.52
Cesium-137	ND	2.82	ND	2.37	ND	0.908	ND	2.33	ND	2.13	ND	2.07
Potassium-40	ND	60.8	71.6 +/- 61	25.6	ND	11.2	ND	39.2	ND	51.2	ND	49.7
Lead-210	ND	198	ND	550	ND	53.4	ND	167	ND	145	ND	436
Lead-212	ND	4.15	ND	3.40	ND	1.45	ND	3.38	ND	2.50	ND	3.07
Lead-214	ND	5.63	ND	4.82	ND	1.71	ND	4.57	ND	3.71	ND	4.11
Radium-226	ND	42.3	ND	63.4	ND	23.2	ND	34.2	ND	27.2	ND	30.7
Thorium-234	ND	64.6	ND	76.5	ND	25.4	ND	51.7	ND	30.4	ND	60.6
Thallium-208	ND	2.98	ND	2.56	ND	0.985	ND	2.46	ND	1.90	ND	2.16
Uranium-235	ND	16.1	ND	14.8	ND	4.68	ND	12.9	ND	8.90	ND	12.0
Isotopic Uranium and Thorium												
Thorium-228	---	---	---	---	0.017U +/- 0.058	0.111	---	---	---	---	0.052 +/- 0.048	0.067
Thorium-230	---	---	---	---	0.058U +/- 0.058	0.126	---	---	---	---	0.091 +/- 0.10	0.235
Thorium-232	---	---	---	---	0.006U +/- 0.023	0.045	---	---	---	---	-0.004 +/- 0.016	0.038
Uranium-233/234	---	---	---	---	8.23 +/- 0.62	0.09	---	---	---	---	7.13 +/- 0.50	0.105
Uranium-235	---	---	---	---	0.362 +/- 0.098	0.057	---	---	---	---	0.389 +/- 0.12	0.068
Uranium-238	---	---	---	---	8.52 +/- 0.64	0.079	---	---	---	---	6.18 +/- 0.45	0.098

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SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier FLUTE Port Sample Type Sample Date Radionuclides (pCi/l)	RD-54B --- Primary 02/26/03		RD-54C --- Primary 02/26/03		RD-57 Z8 Primary 01/29/03		RD-57 Z8 Primary 04/30/03		RD-59A --- Primary 01/31/03		RD-59A --- Primary 05/15/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting												
Actinium-228	ND	7.99	ND	6.76	ND	7.20	ND	5.26	ND	5.39	ND	6.54
Bismuth-212	ND	12.6	ND	12.0	ND	12.2	ND	8.85	ND	10.1	ND	11.9
Bismuth-214	ND	3.84	ND	3.02	ND	3.35	ND	2.6	ND	2.60	ND	4.7
Cobalt-57	ND	1.41	ND	0.946	ND	1.16	ND	0.901	ND	0.979	ND	1.24
Cobalt-60	ND	2.28	ND	1.63	ND	2.12	ND	1.58	ND	1.30	ND	1.47
Cesium-134	ND	4.17	ND	1.88	ND	2.11	ND	3.63	ND	1.69	ND	2.26
Cesium-137	ND	1.80	ND	1.57	ND	1.59	ND	1.25	ND	1.39	ND	1.42
Potassium-40	ND	44.8	ND	20.0	ND	40.0	ND	30.9	ND	14.0	ND	30.6
Lead-210	ND	326	ND	234	ND	317	ND	301	ND	121	ND	395
Lead-212	ND	2.80	ND	2.24	ND	2.41	ND	1.86	ND	2.18	ND	2.32
Lead-214	ND	3.71	ND	2.83	ND	3.21	ND	2.48	ND	2.75	ND	2.98
Radium-226	ND	27.8	ND	22.9	ND	23.4	ND	18.1	ND	22.1	ND	24.2
Thorium-234	ND	55.7	ND	43.7	ND	43.7	ND	36.4	ND	42.4	ND	54.3
Thallium-208	ND	1.86	ND	1.54	ND	1.66	ND	1.28	ND	1.36	ND	1.55
Uranium-235	ND	10.8	ND	6.95	ND	8.96	ND	6.22	ND	8.15	ND	9.36
Isotopic Uranium and Thorium												
Thorium-228	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-233/234	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-235	---	---	---	---	---	---	---	---	---	---	---	---
Uranium-238	---	---	---	---	---	---	---	---	---	---	---	---

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SUMMARY OF ANALYSES FOR GAMMA-EMITTING RADIONUCLIDES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier FLUTe Port Sample Type Sample Date Radionuclides (pCi/l)	RD-59A --- Split 05/15/03		RD-59B --- Primary 01/31/03		RD-59C --- Primary 01/31/03		RD-63 --- Primary 02/05/03		RD-64 Z6 Primary 01/29/03	
	Result	MDA	Result	MDA	Result	MDA	Result	MDA	Result	MDA
Gamma-Emitting										
Actinium-228	ND	10.7	ND	9.42	ND	9.29	ND	9.39	ND	3.38
Bismuth-212	ND	33.0	ND	14.9	ND	16.4	ND	15.6	ND	6.65
Bismuth-214	ND	5.34	ND	4.08	ND	4.01	ND	4.39	ND	1.77
Cobalt-57	ND	8.92	ND	1.42	ND	1.47	ND	1.30	ND	0.668
Cobalt-60	ND	2.68	ND	1.99	ND	2.26	ND	2.61	ND	0.834
Cesium-134	ND	2.65	ND	2.25	ND	2.61	ND	2.97	ND	1.14
Cesium-137	ND	2.28	ND	1.98	ND	2.18	ND	2.04	ND	0.879
Potassium-40	ND	68.3	ND	42.6	ND	28.8	ND	51.2	ND	9.26
Lead-210	---	---	ND	449	ND	172	ND	302	ND	79.1
Lead-212	ND	3.15	ND	2.78	ND	3.10	ND	2.94	ND	1.44
Lead-214	ND	4.49	ND	3.94	ND	4.30	ND	3.90	ND	1.83
Radium-226	---	---	ND	31.0	ND	32.7	ND	28.5	ND	14.6
Thorium-234	ND	424	ND	62.9	ND	51.5	ND	57.0	ND	28.5
Thallium-208	ND	2.73	ND	2.06	ND	2.28	ND	2.14	ND	0.920
Uranium-235	ND	9.40	ND	12.1	ND	12.7	ND	10.9	ND	5.37
Isotopic Uranium and Thorium										
Thorium-228	---	---	---	---	---	---	---	---	---	---
Thorium-230	---	---	---	---	---	---	---	---	---	---
Thorium-232	---	---	---	---	---	---	---	---	---	---
Uranium-233/234	---	---	---	---	---	---	---	---	2.43 +/- 0.20	0.044
Uranium-235	---	---	---	---	---	---	---	---	0.096 +/- 0.044	0.033
Uranium-238	---	---	---	---	---	---	---	---	2.04 +/- 0.18	0.040

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TABLE X
FOOTNOTES AND EXPLANATIONS

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Detected concentrations are presented as the activity plus or minus the error.

Non-detectable results are presented as "ND" with the minimum detectable activity (MDA).

Analyses were performed by Eberline Services of Richmond, California.

Split sample analyses were performed by Severn Trent Laboratories of Richland, Washington.

Analytical results that are less than the procedure background value are shown as negative values.

Samples are filtered and acidified in the field.

(---) = Analysis not performed.

pCi/l = PicoCuries per liter.

Primary = Primary sample.

Split = Sample split.

U = Not detected; numerical value represents the Method Detection Limit for that compound.

Z = FLUTe sample port number.

TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Inorganic Compounds			SH-04	RS-08	HAR-14	HAR-15	HAR-07	HAR-16	HAR-17
Well Identifier			---	---	---	---	---	Comp	---
FLUTe Sample Port			---	---	---	---	---	---	---
Sample Date			04/14/03	04/14/03	04/15/03	04/15/03	04/16/03	04/17/03	04/16/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL							
Antimony	ug/l	6	1.5 J	3.3	0.6 U	6.1	3.2	---	1.3 J
Arsenic	ug/l	50	1.3	3	0.29 U	3.3 U	0.31 U	---	1.2 U
Barium	ug/l	1000	340	76	34	21	26	---	76
Beryllium	ug/l	4	0.29 J	0.11 U	0.11 U	0.11 U	0.11 U	---	0.11 U
Cadmium	ug/l	5	0.17 J	0.14 J	0.047 J	0.14 J	0.03 U	---	0.088 J
Chromium	ug/l	50	1.9	0.14 U	0.14 U	0.81 U	0.14 U	---	1.2 U
Cobalt	ug/l	NA	0.52 J	4.8	0.42 J	0.61 J	0.39 J	---	1.2
Copper	ug/l	1000 SMCL	3.8	2.3	0.58 J	1.9 J	1.4 J	---	5.6
Cyanide	mg/l	0.15	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U
Lead	ug/l	15 ECAL	0.13 U	0.13 U	0.13 U	0.41 J	0.13 U	---	0.31 J
Mercury	mg/l	0.002	0.000069 J	0.000063 U	0.000063 U	0.000063 U	0.000063 U	---	0.000063 U
Nickel	ug/l	100	3.3	15	3.8	4.1	3	---	7.4
Selenium	ug/l	50	1.7 J	2.5	1.6 J	0.91 J	0.99 J	---	3.2
Silver	ug/l	100 SMCL	0.082 J	0.054 J	0.054 U	0.054 U	0.054 U	---	0.054 U
Sulfide	mg/l	NA	0.017 U	0.04 J	0.019 J	0.15	0.017 U	0.017 U	0.017 U
Thallium	ug/l	2	0.21 J	0.19 J	0.092 U	0.092 U	0.092 U	---	0.14 J
Tin	mg/l	NA	0.0024 U	0.0024 U	0.0024 U	0.0024 U	0.0024 U	---	0.0024 U
Vanadium	ug/l	50 ACAL	3.9	1	0.58 J	8.3	0.39 U	---	1
Zinc	ug/l	5000 SMCL	130	5 J	4.3 J	8.2 J	21	---	170
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Pesticides and Herbicides			SH-04	RS-08	HAR-14	HAR-15	HAR-07	HAR-16	HAR-17
Well Identifier			---	---	---	---	---	Comp	---
FLUTe Sample Port			---	---	---	---	---	---	---
Sample Date			04/14/03	04/14/03	04/15/03	04/15/03	04/16/03	04/17/03	04/16/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL							
Aldrin	ug/l	0.002 ACAL	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	---	0.012 U
alpha-BHC	ug/l	0.015 ACAL	0.017 U	0.017 U	0.017 U	0.017 U	0.017 U	---	0.017 U
beta-BHC	ug/l	0.025 ACAL	0.036 U	0.036 U	0.036 U	0.036 U	0.036 U	---	0.036 U
delta-BHC	ug/l	NA	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	---	0.015 U
Gamma-BHC (Lindane)	ug/l	0.2	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	---	0.015 U
Chlordane	ug/l	0.1	0.057 U	0.057 U	0.057 U	0.057 U	0.057 U	---	0.057 U
Chlorobenzilate	ug/l	NA	10 U	9.8 U	9.7 U	10 U	9.6 U	9.7 U	9.7 U
4,4'-DDD	ug/l	NA	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	---	0.013 U
4,4'-DDE	ug/l	NA	0.013 U	0.013 U	0.013 U	0.013 U	0.013 U	---	0.013 U
4,4'-DDT	ug/l	NA	0.019 U	0.019 U	0.019 U	0.019 U	0.019 U	---	0.019 U
Diallate	ug/l	NA	10 U	9.8 U	9.7 U	10 U	9.6 U	9.7 U	9.7 U
Dieldrin	ug/l	0.002 ACAL	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	---	0.012 U
Dinoseb	ug/l	7	0.79 UJ	0.78 UJ	0.77 UJ	0.8 UJ	0.75 U	---	0.75 UJ
Endosulfan-I	ug/l	NA	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	---	0.011 U
Endosulfan-II	ug/l	NA	0.037 U	0.037 U	0.037 U	0.037 U	0.037 U	---	0.037 U
Endosulfan sulfate	ug/l	NA	0.025 U	0.025 U	0.025 U	0.025 U	0.025 U	---	0.025 U
Endrin	ug/l	2	0.011 U	0.011 U	0.011 U	0.011 U	0.011 U	---	0.011 U
Endrin aldehyde	ug/l	NA	0.016 U	0.016 U	0.016 U	0.016 U	0.016 U	---	0.016 U
Heptachlor	ug/l	0.01	0.015 U	0.015 U	0.015 U	0.015 U	0.015 U	---	0.015 U
Heptachlor epoxide	ug/l	0.01	0.012 U	0.012 U	0.012 U	0.012 U	0.012 U	---	0.012 U
Isodrin	ug/l	NA	20 U	20 U	19 U	20 U	19 U	19 U	19 U
Kepone	ug/l	NA	200 U	200 U	190 U	200 U	190 U	190 U	190 U
Methoxychlor	ug/l	30	0.031 U	0.031 U	0.031 U	0.031 U	0.031 U	---	0.031 U
Aroclor 1016	ug/l	0.5(total)	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U	---	0.19 U
Aroclor 1221	ug/l	0.5(total)	0.063 U	0.063 U	0.063 U	0.063 U	0.063 U	---	0.063 U
Aroclor 1232	ug/l	0.5(total)	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U	---	0.13 U

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TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

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Pesticides and Herbicides								
Well Identifier			SH-04	RS-08	HAR-14	HAR-15	HAR-07	HAR-16
FLUTe Sample Port			---	---	---	---	---	Comp
Sample Date			04/14/03	04/14/03	04/15/03	04/15/03	04/16/03	04/17/03
Sample Type			Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	MCL						
Aroclor 1242	ug/l	0.5(total)	0.21 U	0.21 U	0.21 U	0.21 U	0.21 U	---
Aroclor 1248	ug/l	0.5(total)	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	---
Aroclor 1254	ug/l	0.5(total)	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	---
Aroclor 1260	ug/l	0.5(total)	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U	---
Toxaphene	ug/l	3	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U	---
2,4-D	ug/l	70	0.25 UJ	0.25 UJ	0.25 UJ	0.26 UJ	0.24 U	---
2,4,5-T	ug/l	NA	0.13 UJ	0.13 UJ	0.13 UJ	0.14 UJ	0.13 U	---
2,4,5-TP (Silvex)	ug/l	50	0.15 U	0.14 U	0.14 U	0.15 U	0.14 U	---
2,3,7,8-TCDD TEQ	pg/l	0.03	2.7 U	3.9 U	2.7 U	6.3 U	10.2 U	---
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA

TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Volatile Organic Compounds			SH-04	SH-04	RS-08	RS-08	HAR-14	HAR-14
Well Identifier			---	---	---	---	---	---
FLUTe Sample Port			---	---	---	---	---	---
Sample Date			04/14/03	04/14/03	04/14/03	04/14/03	04/15/03	04/15/03
Sample Type			Primary	Split	Primary	Split	Primary	Split
Sample Qualifier			---	---	pH	---	---	---
Compound	Units	MCL						
1,1,1,2-Tetrachloroethane	ug/l	NA	0.54 U	---	0.27 U	---	0.27 U	---
1,1,1-Trichloroethane	ug/l	200	4	4	0.3 U	0.2 U	1.1 J	---
1,1,2,2-Tetrachloroethane	ug/l	1	0.58 U	0.4 U	0.29 U	0.4 U	0.29 U	---
1,1,2-Trichloroethane	ug/l	5	0.6 U	0.2 U	0.3 U	0.2 U	0.3 U	---
1,1-Dichloroethane	ug/l	5	14	12	0.27 U	0.2 U	0.27 U	---
1,1-Dichloroethene	ug/l	6	5 J	4.3	0.32 U	0.3 U	8.4	---
1,2,3-Trichloropropane	ug/l	0.005 ACAL	0.0094 J	---	0.0019 U	---	0.0019 U	---
1,2-Dibromo-3-chloropropane	ug/l	0.2	0.0018 U	---	0.0018 U	---	0.0018 U	---
1,2-Dibromoethane	ug/l	0.05	0.0021 U	---	0.0021 U	---	0.0021 U	---
1,2-Dichloroethane	ug/l	0.5	6.2	7.3	0.28 U	0.2 U	0.28 U	---
1,2-Dichloropropane	ug/l	5	0.7 U	0.4 U	0.35 U	0.4 U	0.35 U	---
1,4-Dioxane	ug/l	3 ACAL	29	---	0.07 U	---	160	94
2-Butanone	ug/l	NA	7.6 U	7 U	3.8 U	7 U	3.8 UJ	---
2-Hexanone	ug/l	NA	5 U	0.7 U	2.5 U	0.7 U	2.5 UJ	---
4-Methyl-2-pentanone	ug/l	120 ACAL	5 U	0.2 U	2.5 U	0.2 U	2.5 U	---
Acetone	ug/l	NA	9 U	3 U	4.9 UJ	3 U	4.5 UJ	---
Acetonitrile	ug/l	NA	5.6 U	---	5.6 U	---	5.6 U	---
Acrolein	ug/l	NA	4.6 U	---	4.6 U	---	4.6 U	---
Acrylonitrile	ug/l	NA	5.1 U	---	5.1 U	---	5.1 U	---
Allyl Chloride	ug/l	NA	0.35 UJ	---	0.35 UJ	---	0.35 UJ	---
Benzene	ug/l	1	0.56 U	0.1 U	0.28 U	0.1 U	0.28 U	---
Bromodichloromethane	ug/l	NA	0.6 U	0.1 U	0.3 U	0.1 U	0.3 U	---
Bromoform	ug/l	NA	0.5 U	0.4 U	0.25 U	0.4 U	0.25 U	---
Bromomethane	ug/l	NA	0.4 U	0.5 U	0.2 U	0.5 U	0.2 U	---
Carbon disulfide	ug/l	160 ACAL	0.66 U	0.2 U	0.33 U	0.2 U	0.33 U	---
Carbon tetrachloride	ug/l	0.5	170	170	0.28 U	0.3 U	1.7 J	---
Chlorobenzene	ug/l	70	0.72 U	0.1 U	0.36 U	0.1 U	0.36 U	---
Chloroethane	ug/l	NA	0.66 U	0.3 U	0.33 U	0.3 U	0.33 U	---
Chloroform	ug/l	NA	51	50	0.33 U	0.2 U	2.6	---
Chloromethane	ug/l	NA	0.28 U	0.4 U	0.14 U	0.4 U	0.14 U	---
Chloroprene	ug/l	NA	0.18 U	---	0.18 U	---	0.18 U	---
cis-1,2-Dichloroethene	ug/l	6	11	10	7.8	6.3	0.32 U	---
cis-1,3-Dichloropropene	ug/l	0.5(total)	0.44 U	0.2 U	0.22 U	0.2 U	0.22 U	---
Dibromochloromethane	ug/l	NA	0.56 U	0.2 U	0.28 U	0.2 U	0.28 U	---
Dibromomethane	ug/l	NA	0.72 U	---	0.36 U	---	0.36 U	---
Dichlorodifluoromethane	ug/l	1000 ACAL	2.2 U	---	1.1 U	---	1.1 U	---
Ethyl methacrylate	ug/l	NA	0.37 U	---	0.37 U	---	0.37 U	---
Ethylbenzene	ug/l	300	0.5 U	0.2 U	0.25 U	0.2 U	0.25 U	---
Iodomethane	ug/l	NA	1 U	---	1 U	---	1 U	---
Isobutanol	ug/l	NA	8.4 U	---	8.4 U	---	8.4 U	---
m,p-Xylenes	ug/l	1750(total)	0.76 U	0.3 U	0.38 U	0.3 U	0.38 U	---
Methacrylonitrile	ug/l	NA	0.32 U	---	0.32 U	---	0.32 U	---
Methyl methacrylate	ug/l	NA	0.43 U	---	0.43 U	---	0.43 U	---

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TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Volatile Organic Compounds								
Well Identifier			SH-04	SH-04	RS-08	RS-08	HAR-14	HAR-14
FLUTe Sample Port			---	---	---	---	---	---
Sample Date			04/14/03	04/14/03	04/14/03	04/14/03	04/15/03	04/15/03
Sample Type			Primary	Split	Primary	Split	Primary	Split
Sample Qualifier			---	---	pH	---	---	---
Compound	Units	MCL						
Methylene chloride	ug/l	5	1.3 U	3 U	0.33 U	3 U	0.33 U	---
o-Xylene	ug/l	1750(total)	0.48 U	0.2 U	0.24 U	0.2 U	0.24 U	---
Propionitrile	ug/l	NA	4.7 U	---	4.7 U	---	4.7 U	---
Styrene	ug/l	100	0.32 U	---	0.16 U	---	0.16 U	---
Tetrachloroethene	ug/l	5	13	16	0.32 U	0.2 U	0.32 U	---
Toluene	ug/l	150	0.98 U	0.2 U	0.49 U	0.2 U	0.49 U	---
trans-1,2-Dichloroethene	ug/l	10	0.54 U	0.2 U	0.91 J	0.75	0.27 U	---
trans-1,3-Dichloropropene	ug/l	0.5(total)	0.48 U	0.2 U	0.24 U	0.2 U	0.24 U	---
Trans-1,4-Dichloro-2-butene	ug/l	NA	1.1 U	---	1.1 U	---	1.1 U	---
Trichloroethene	ug/l	5	69	70	0.26 U	0.2 U	4.6	---
Trichlorofluoromethane	ug/l	150	0.68 U	0.1 U	0.34 U	0.1 U	0.34 U	---
Vinyl acetate	ug/l	NA	0.7 U	---	0.35 U	---	0.35 U	---
Vinyl chloride	ug/l	0.5	0.38 U	0.2 U	0.75 J	0.2 U	0.19 U	---
Laboratory			DMA	AMA	DMA	AMA	DMA	DMA

TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Volatile Organic Compounds			HAR-14	HAR-15	HAR-15	HAR-15	HAR-07	HAR-07
Well Identifier			---	---	---	---	---	---
FLUTe Sample Port			---	---	---	---	---	---
Sample Date			12/03/03	04/15/03	12/03/03	12/03/03	04/16/03	04/16/03
Sample Type			Primary	Primary	Primary	Dup	Primary	Split
Sample Qualifier			---	---	---	---	---	---
Compound	Units	MCL						
1,1,1,2-Tetrachloroethane	ug/l	NA	---	0.27 U	---	---	11 U	---
1,1,1-Trichloroethane	ug/l	200	1.1	0.3 U	0.3 U	0.3 U	12 U	---
1,1,2,2-Tetrachloroethane	ug/l	1	0.24 U	0.29 U	0.24 U	0.24 U	12 U	---
1,1,2-Trichloroethane	ug/l	5	0.3 U	0.3 U	0.3 U	0.3 U	12 U	---
1,1-Dichloroethane	ug/l	5	0.27 U	0.27 U	0.27 U	0.27 U	11 U	---
1,1-Dichloroethene	ug/l	6	9.6	0.32 U	0.32 U	0.32 U	13 U	---
1,2,3-Trichloropropane	ug/l	0.005 ACAL	---	0.0019 U	---	---	0.0019 U	---
1,2-Dibromo-3-chloropropane	ug/l	0.2	---	0.0018 U	---	---	0.0018 U	---
1,2-Dibromoethane	ug/l	0.05	---	0.0021 U	---	---	0.0021 U	---
1,2-Dichloroethane	ug/l	0.5	0.28 U	0.28 U	0.28 U	0.28 U	11 U	---
1,2-Dichloropropane	ug/l	5	0.35 U	0.35 U	0.35 U	0.35 U	14 U	---
1,4-Dioxane	ug/l	3 ACAL	---	2.54 C	---	---	0.07 U	0.54 U
2-Butanone	ug/l	NA	3.8 U	3.8 U	3.8 U	3.8 U	150 U	---
2-Hexanone	ug/l	NA	2.6 U	2.5 U	2.6 U	2.6 U	100 U	---
4-Methyl-2-pentanone	ug/l	120 ACAL	2.5 U	2.5 U	2.5 U	2.5 U	100 U	---
Acetone	ug/l	NA	4.5 U	4.8 U	4.5 U	4.6 J	180 U	---
Acetonitrile	ug/l	NA	---	5.6 U	---	---	220 U	---
Acrolein	ug/l	NA	---	4.6 U	---	---	4.6 U	---
Acrylonitrile	ug/l	NA	---	5.1 U	---	---	5.1 U	---
Allyl Chloride	ug/l	NA	---	0.35 UJ	---	---	14 UJ	---
Benzene	ug/l	1	0.28 U	0.28 U	0.28 U	0.28 U	11 U	---
Bromodichloromethane	ug/l	NA	0.3 U	0.3 U	0.3 U	0.3 U	12 U	---
Bromoform	ug/l	NA	0.32 U	0.25 U	0.32 U	0.32 U	10 U	---
Bromomethane	ug/l	NA	0.34 U	0.2 U	0.34 U	0.34 U	8 U	---
Carbon disulfide	ug/l	160 ACAL	0.48 U	0.33 U	0.48 U	0.48 U	13 U	---
Carbon tetrachloride	ug/l	0.5	2.2	0.28 UJ	0.28 U	0.28 U	11 U	---
Chlorobenzene	ug/l	70	0.36 U	0.36 U	0.36 U	0.36 U	14 U	---
Chloroethane	ug/l	NA	0.33 U	0.33 U	0.33 U	0.33 U	13 U	---
Chloroform	ug/l	NA	2.5	0.33 U	0.33 U	0.33 U	13 U	---
Chloromethane	ug/l	NA	0.3 U	0.14 U	0.3 U	0.3 U	5.6 U	---
Chloroprene	ug/l	NA	---	0.18 U	---	---	7.2 U	---
cis-1,2-Dichloroethene	ug/l	6	0.32 U	0.32 U	0.32 U	0.32 U	2800	---
cis-1,3-Dichloropropene	ug/l	0.5(total)	0.22 U	0.22 U	0.22 U	0.22 U	8.8 U	---
Dibromochloromethane	ug/l	NA	0.28 U	0.28 U	0.28 U	0.28 U	11 U	---
Dibromomethane	ug/l	NA	---	0.36 U	---	---	14 U	---
Dichlorodifluoromethane	ug/l	1000 ACAL	---	1.1 U	---	---	44 U	---
Ethyl methacrylate	ug/l	NA	---	0.37 U	---	---	9.6 U	---
Ethylbenzene	ug/l	300	0.25 U	0.25 U	0.25 U	0.25 U	10 U	---
Iodomethane	ug/l	NA	---	1 U	---	---	40 U	---
Isobutanol	ug/l	NA	---	8.4 U	---	---	340 U	---
m,p-Xylenes	ug/l	1750(total)	0.52 U	0.38 U	0.52 U	0.52 U	15 U	---
Methacrylonitrile	ug/l	NA	---	0.32 U	---	---	13 U	---
Methyl methacrylate	ug/l	NA	---	0.43 U	---	---	17 U	---

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SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Volatile Organic Compounds								
Well Identifier			HAR-14	HAR-15	HAR-15	HAR-15	HAR-07	HAR-07
FLUTe Sample Port			---	---	---	---	---	---
Sample Date			12/03/03	04/15/03	12/03/03	12/03/03	04/16/03	04/16/03
Sample Type			Primary	Primary	Primary	Dup	Primary	Split
Sample Qualifier			---	---	---	---	---	---
Compound	Units	MCL						
Methylene chloride	ug/l	5	0.48 U	0.33 U	0.48 U	0.48 U	17 U	---
o-Xylene	ug/l	1750(total)	0.24 U	0.24 U	0.24 U	0.24 U	9.6 U	---
Propionitrile	ug/l	NA	---	4.7 U	---	---	190 U	---
Styrene	ug/l	100	---	0.16 U	---	---	6.4 U	---
Tetrachloroethene	ug/l	5	0.32 U	0.32 U	0.32 U	0.32 U	13 U	---
Toluene	ug/l	150	0.36 U	0.49 U	0.36 U	0.36 U	20 U	---
trans-1,2-Dichloroethene	ug/l	10	0.27 U	0.27 U	0.27 U	0.27 U	99	---
trans-1,3-Dichloropropene	ug/l	0.5(total)	0.24 U	0.24 U	0.24 U	0.24 U	9.6 U	---
Trans-1,4-Dichloro-2-butene	ug/l	NA	---	1.1 U	---	---	44 U	---
Trichloroethene	ug/l	5	4.4	0.26 U	0.26 U	0.26 U	3300	---
Trichlorofluoromethane	ug/l	150	0.34 U	0.34 U	0.34 U	0.34 U	14 U	---
Vinyl acetate	ug/l	NA	---	0.35 U	---	---	14 U	---
Vinyl chloride	ug/l	0.5	0.26 U	0.19 U	0.26 U	0.26 U	110 J	---
Laboratory			DMA	DMA	DMA	DMA	DMA	DMA

TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Volatile Organic Compounds			HAR-07	HAR-16	HAR-17	HAR-17	HAR-17
Well Identifier			---	Comp	---	---	---
FLUTE Sample Port			---	---	---	---	---
Sample Date			11/21/03	04/17/03	04/16/03	04/16/03	11/21/03
Sample Type			Primary	Primary	Primary	Dup	Primary
Sample Qualifier			---	---	---	---	---
Compound	Units	MCL					
1,1,1,2-Tetrachloroethane	ug/l	NA	---	14 U	0.27 U	0.27 U	---
1,1,1-Trichloroethane	ug/l	200	15 U	15 U	0.3 U	0.3 U	0.3 U
1,1,2,2-Tetrachloroethane	ug/l	1	12 U	14 U	0.29 U	0.29 U	0.24 U
1,1,2-Trichloroethane	ug/l	5	15 U	15 U	0.3 U	0.3 U	0.3 U
1,1-Dichloroethane	ug/l	5	14 U	14 U	0.49 J	0.44 J	0.93 J
1,1-Dichloroethene	ug/l	6	16 U	16 U	1.6 J	1.9 J	2.1
1,2,3-Trichloropropane	ug/l	0.005 ACAL	---	0.0019 U	0.0019 U	---	---
1,2-Dibromo-3-chloropropane	ug/l	0.2	---	0.0018 U	0.0018 U	---	---
1,2-Dibromoethane	ug/l	0.05	---	0.0021 U	0.0021 U	---	---
1,2-Dichloroethane	ug/l	0.5	14 U	14 U	0.28 U	0.28 U	0.28 U
1,2-Dichloropropane	ug/l	5	18 U	18 U	0.35 U	0.35 U	0.35 U
1,4-Dioxane	ug/l	3 ACAL	---	43	5.44	---	---
2-Butanone	ug/l	NA	190 U	190 U	3.8 U	3.8 U	3.8 U
2-Hexanone	ug/l	NA	130 U	120 U	2.5 U	2.5 U	2.6 U
4-Methyl-2-pentanone	ug/l	120 ACAL	120 U	120 U	2.5 U	2.5 U	2.5 U
Acetone	ug/l	NA	220 U	220 U	4.6 J	4.5 U	4.5 U
Acetonitrile	ug/l	NA	---	280 U	5.6 U	5.6 U	---
Acrolein	ug/l	NA	---	4.6 U	4.6 U	---	---
Acrylonitrile	ug/l	NA	---	5.1 U	5.1 U	---	---
Allyl Chloride	ug/l	NA	---	18 UJ	0.35 UJ	0.35 UJ	---
Benzene	ug/l	1	18 J	14 U	0.28 U	0.28 U	0.28 U
Bromodichloromethane	ug/l	NA	15 U	15 U	0.3 U	0.3 U	0.3 U
Bromoform	ug/l	NA	16 U	12 U	0.25 U	0.25 U	0.32 U
Bromomethane	ug/l	NA	17 U	10 U	0.2 U	0.2 U	0.34 U
Carbon disulfide	ug/l	160 ACAL	24 U	16 U	0.33 U	0.33 U	0.48 U
Carbon tetrachloride	ug/l	0.5	14 U	14 U	0.28 U	0.28 U	0.28 U
Chlorobenzene	ug/l	70	18 U	18 U	0.36 U	0.36 U	0.36 U
Chloroethane	ug/l	NA	16 U	16 U	0.33 U	0.33 U	0.33 U
Chloroform	ug/l	NA	16 U	16 U	0.33 U	0.33 U	0.33 U
Chloromethane	ug/l	NA	15 U	7 U	0.14 U	0.14 U	0.3 U
Chloroprene	ug/l	NA	---	9 U	0.18 U	0.18 U	---
cis-1,2-Dichloroethene	ug/l	6	3200	250	20	18	24
cis-1,3-Dichloropropene	ug/l	0.5(total)	11 U	11 U	0.22 U	0.22 U	0.22 U
Dibromochloromethane	ug/l	NA	14 U	14 U	0.28 U	0.28 U	0.28 U
Dibromomethane	ug/l	NA	---	18 U	0.36 U	0.36 U	---
Dichlorodifluoromethane	ug/l	1000 ACAL	---	55 U	1.1 U	1.1 U	---
Ethyl methacrylate	ug/l	NA	---	9.7 U	0.37 U	0.37 U	---
Ethylbenzene	ug/l	300	12 U	12 U	0.25 U	0.25 U	0.25 U
Iodomethane	ug/l	NA	---	50 U	1 U	1 U	---
Isobutanol	ug/l	NA	---	420 U	8.4 U	8.4 U	---
m,p-Xylenes	ug/l	1750(total)	26 U	19 U	0.38 U	0.38 U	0.52 U
Methacrylonitrile	ug/l	NA	---	16 U	0.32 U	0.32 U	---
Methyl methacrylate	ug/l	NA	---	22 U	0.43 U	0.43 U	---

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See last page of Table XI for footnotes and explanations.

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TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Volatile Organic Compounds							
Well Identifier			HAR-07	HAR-16	HAR-17	HAR-17	HAR-17
FLUTE Sample Port			---	Comp	---	---	---
Sample Date			11/21/03	04/17/03	04/16/03	04/16/03	11/21/03
Sample Type			Primary	Primary	Primary	Dup	Primary
Sample Qualifier			---	---	---	---	---
Compound	Units	MCL					
Methylene chloride	ug/l	5	24 U	37 U	0.62 U	0.38 UJ	0.48 U
o-Xylene	ug/l	1750(total)	12 U	12 U	0.24 U	0.24 U	0.24 U
Propionitrile	ug/l	NA	---	240 U	4.7 U	4.7 U	---
Styrene	ug/l	100	---	8 U	0.16 U	0.16 U	---
Tetrachloroethene	ug/l	5	16 U	16 U	0.32 U	0.32 U	0.32 U
Toluene	ug/l	150	18 U	24 U	0.49 U	0.49 U	0.36 U
trans-1,2-Dichloroethene	ug/l	10	120	14 U	1.7 J	1.1 J	1
trans-1,3-Dichloropropene	ug/l	0.5(total)	12 U	12 U	0.24 U	0.24 U	0.24 U
Trans-1,4-Dichloro-2-butene	ug/l	NA	---	55 U	1.1 U	1.1 U	---
Trichloroethene	ug/l	5	5600	2300	93 J	83	100
Trichlorofluoromethane	ug/l	150	17 U	17 U	0.34 U	0.34 U	0.34 U
Vinyl acetate	ug/l	NA	---	18 U	0.35 U	0.35 U	---
Vinyl chloride	ug/l	0.5	54	9.5 U	0.19 U	0.19 U	0.26 U
Laboratory			DMA	DMA	DMA	DMA	DMA

TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds			SH-04	RS-08	HAR-14	HAR-15
Well Identifier			---	---	---	---
FLUTE Sample Port			---	---	---	---
Sample Date			04/14/03	04/14/03	04/15/03	04/15/03
Sample Type			Primary	Primary	Primary	Primary
Sample Qualifier			---	---	---	---
Compound	Units	MCL				
1,2,4,5-Tetrachlorobenzene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
1,2,4-Trichlorobenzene	ug/l	70	3.4 U	3.4 U	3.3 U	3.4 U
1,2-Dichlorobenzene	ug/l	600	0.64 U	0.32 U	0.32 U	0.32 U
1,3,5-Trinitrobenzene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
1,3-Dichlorobenzene	ug/l	600 ACAL	0.7 U	0.35 U	0.35 U	0.35 U
1,3-Dinitrobenzene	ug/l	NA	20 U	20 U	19 U	20 U
1,4-Dichlorobenzene	ug/l	5	0.74 U	0.37 U	0.37 U	0.37 U
1,4-Naphthoquinone	ug/l	NA	20 U	20 U	19 U	20 U
1,4-Phenylenediamine	ug/l	NA	50 U	49 U	49 U	50 U
1-Naphthylamine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
2,3,4,6-Tetrachlorophenol	ug/l	NA	10 U	9.8 U	9.7 U	10 U
2,4,5-Trichlorophenol	ug/l	NA	4 U	3.9 U	3.8 U	4 U
2,4,6-Trichlorophenol	ug/l	NA	4.5 U	4.4 U	4.4 U	4.5 U
2,4-Dichlorophenol	ug/l	NA	4.8 U	4.7 U	4.6 U	4.8 U
2,4-Dimethylphenol	ug/l	100 ACAL	6 U	5.9 U	5.8 U	6 U
2,4-Dinitrophenol	ug/l	NA	1.3 U	1.3 U	1.2 U	1.3 U
2,4-Dinitrotoluene	ug/l	NA	1.3 U	1.3 U	1.2 U	1.3 U
2,6-Dichlorophenol	ug/l	NA	10 U	9.8 U	9.7 U	10 U
2,6-Dinitrotoluene	ug/l	NA	1.9 U	1.9 U	1.9 U	1.9 U
2-Acetylaminofluorene	ug/l	NA	20 U	20 U	19 U	20 U
2-Chloronaphthalene	ug/l	NA	3 U	3 U	2.9 U	3 U
2-Chlorophenol	ug/l	NA	4.9 U	4.8 U	4.8 U	4.9 U
2-Methylnaphthalene	ug/l	NA	3.5 U	3.4 U	3.4 U	3.5 U
2-Methylphenol	ug/l	NA	5.3 U	5.2 U	5.1 U	5.3 U
2-Naphthylamine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
2-Nitroaniline	ug/l	NA	2.6 U	2.6 U	2.6 U	2.6 U
2-Nitrophenol	ug/l	NA	4.8 U	4.7 U	4.6 U	4.8 U
2-Picoline	ug/l	NA	10 U	9.8 U	9.7 U	10 U
3,3'-Dichlorobenzidine	ug/l	NA	5 U	4.9 U	4.9 U	5 U
3,3'-Dimethylbenzidine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
3-Methylcholanthrene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
3-Methylphenol	ug/l	NA	10 U	9.8 U	9.7 U	10 U
3-Nitroaniline	ug/l	NA	4 U	3.9 U	3.8 U	4 U
4-Aminobiphenyl	ug/l	NA	20 U	20 U	19 U	20 U
4-Bromophenyl phenyl ether	ug/l	NA	2.1 U	2 U	2 U	2.1 U
4-Chloro-3-methylphenol	ug/l	NA	4 U	4 U	3.9 U	4 U
4-Chloroaniline	ug/l	NA	2.9 U	2.8 U	2.8 U	2.9 U
4-Chlorophenyl phenyl ether	ug/l	NA	2.6 U	2.6 U	2.6 U	2.6 U
4-methylphenol	ug/l	NA	4.5 U	4.4 U	4.4 U	4.5 U
4-Nitroaniline	ug/l	NA	5 U	4.9 U	4.8 U	5 U
4-Nitrophenol	ug/l	NA	1.7 U	1.7 U	1.6 U	1.7 U
4-Nitroquinoline-1-oxide	ug/l	NA	50 U	49 U	49 U	50 U

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See last page of Table XI for footnotes and explanations.

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TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds			SH-04	RS-08	HAR-14	HAR-15
Well Identifier			---	---	---	---
FLUTE Sample Port			---	---	---	---
Sample Date			04/14/03	04/14/03	04/15/03	04/15/03
Sample Type			Primary	Primary	Primary	Primary
Sample Qualifier			---	---	---	---
Compound	Units	MCL				
4,6-Dinitro-2-methylphenol	ug/l	NA	2.2 U	2.2 U	2.1 U	2.2 U
5-Nitro-o-toluidine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
7,12-Dimethylbenz(a)anthracene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Acenaphthene	ug/l	NA	2.6 U	2.6 U	2.6 U	2.6 U
Acenaphthylene	ug/l	NA	2.5 U	2.4 U	2.4 U	2.5 U
Acetophenone	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Aniline	ug/l	NA	5 U	4.9 U	4.8 U	5 U
Anthracene	ug/l	NA	0.8 U	0.78 U	0.78 U	0.8 U
Aramite	ug/l	NA	200 U	200 U	190 U	200 U
Benzo (b+k) fluoranthene (total)	ug/l	NA	1.8 U	1.7 U	1.7 U	1.8 U
Benzo(a)anthracene	ug/l	NA	0.53 U	0.52 U	0.51 U	0.53 U
Benzo(a)pyrene	ug/l	0.2	0.97 U	0.95 U	0.94 U	0.97 U
Benzo(ghi)perylene	ug/l	NA	0.98 U	0.96 U	0.95 U	0.98 U
Benzyl Alcohol	ug/l	NA	3.1 U	3.1 U	3 U	3.1 U
Bis(2-Chloroethoxy)methane	ug/l	NA	3.6 U	3.6 U	3.5 U	3.6 U
Bis(2-chloroethyl)ether	ug/l	NA	3.6 U	3.5 U	3.5 U	3.6 U
Bis(2-chloroisopropyl)ether	ug/l	NA	4 U	4 U	3.9 U	4 U
Bis(2-Ethylhexyl) phthalate	ug/l	4	3.6 U	3.6 U	3.5 U	3.6 U
Butyl benzyl phthalate	ug/l	NA	0.91 U	0.89 U	0.88 U	0.91 U
Chrysene	ug/l	NA	0.96 U	0.94 U	0.93 U	0.96 U
Di-n-butyl phthalate	ug/l	NA	0.92 U	0.9 U	0.89 U	0.92 U
Di-n-octyl phthalate	ug/l	NA	0.93 U	0.91 U	0.9 U	0.93 U
Dibenz(a,h)anthracene	ug/l	NA	0.89 U	0.87 U	0.86 U	0.89 U
Dibenzofuran	ug/l	NA	2.5 U	2.5 U	2.5 U	2.5 U
Diethyl phthalate	ug/l	NA	1.2 U	1.2 U	1.2 U	1.2 U
Dimethoate	ug/l	1 ACAL	0.33 U	0.34 U	0.32 U	0.34 U
Dimethyl phthalate	ug/l	NA	1.9 U	1.8 U	1.8 U	1.9 U
Diphenylamine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Disulfoton	ug/l	NA	0.15 U	0.15 U	0.14 U	0.15 U
Ethyl methanesulfonate	ug/l	NA	20 U	20 U	19 U	20 U
Famphur	ug/l	NA	200 U	200 U	190 U	200 U
Fluoranthene	ug/l	NA	0.78 U	0.76 U	0.76 U	0.78 U
Fluorene	ug/l	NA	2.6 U	2.6 U	2.6 U	2.6 U
Hexachlorobenzene	ug/l	1	1.7 U	1.7 U	1.7 U	1.7 U
Hexachlorobutadiene	ug/l	NA	3.1 U	3.1 U	3 U	3.1 U
Hexachlorocyclopentadiene	ug/l	50	1.4 U	1.3 UJ	1.3 UJ	1.4 UJ
Hexachloroethane	ug/l	NA	2.4 U	2.3 U	2.3 U	2.4 U
Hexachlorophene	ug/l	NA	200 U	200 U	190 U	200 U
Hexachloropropene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Indeno(1,2,3-cd)pyrene	ug/l	NA	0.78 U	0.76 U	0.76 U	0.78 U
Isophorone	ug/l	NA	3.2 U	3.2 U	3.1 U	3.2 U
Isosafrole	ug/l	NA	10 U	9.8 U	9.7 U	10 U

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See last page of Table XI for footnotes and explanations.

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TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds			SH-04	RS-08	HAR-14	HAR-15
Well Identifier			---	---	---	---
FLUTe Sample Port			---	---	---	---
Sample Date			04/14/03	04/14/03	04/15/03	04/15/03
Sample Type			Primary	Primary	Primary	Primary
Sample Qualifier			---	---	---	---
Compound	Units	MCL				
Methapyrilene	ug/l	NA	100 U	98 U	97 U	100 U
Methyl methanesulfonate	ug/l	NA	10 U	9.8 U	9.7 U	10 U
N-Nitrosodi-n-butylamine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
N-Nitrosodi-n-propylamine	ug/l	NA	3.7 U	3.6 U	3.6 U	3.7 U
N-Nitrosodiethylamine	ug/l	NA	20 U	20 U	19 U	20 U
N-Nitrosodimethylamine	ng/l	10 ACAL	280	22	1300 J	0.5 U
N-Nitrosodiphenylamine	ug/l	NA	2.8 U	2.7 U	2.7 U	2.8 U
N-Nitrosomethylethylamine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
N-Nitrosomorpholine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
N-Nitrosopiperidine	ug/l	NA	20 U	20 U	19 U	20 U
N-Nitrosopyrrolidine	ug/l	NA	40 U	39 U	39 U	40 U
Naphthalene	ug/l	170 ACAL	3.8 U	3.7 U	3.7 U	3.8 U
Nitrobenzene	ug/l	NA	3.3 U	3.2 U	3.2 U	3.3 U
O,O,O-Triethylphosphorothioate	ug/l	NA	10 U	9.8 U	9.7 U	10 U
o-Toluidine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
p-Dimethylaminoazobenzene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Parathion-ethyl	ug/l	40 ACAL	0.15 U	0.16 U	0.14 U	0.15 U
Parathion-methyl	ug/l	2 ACAL	0.13 U	0.13 U	0.12 U	0.13 U
Pentachlorobenzene	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Pentachloroethane	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Pentachloronitrobenzene	ug/l	20 ACAL	20 U	20 U	19 U	20 U
Pentachlorophenol	ug/l	1	0.165 U	0.165 U	0.165 U	0.165 U
Phenacetin	ug/l	NA	20 U	20 U	19 U	20 U
Phenanthrene	ug/l	NA	1.4 U	1.4 U	1.4 U	1.4 U
Phenol	ug/l	4200 ACAL	4 U	3.9 U	3.9 U	4 U
a,a-Dimethylphenethylamine	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Phorate	ug/l	NA	0.14 U	0.14 U	0.13 U	0.14 U
Pronamide	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Pyrene	ug/l	NA	0.72 U	0.71 U	0.7 U	0.72 U
Pyridine	ug/l	NA	2.1 U	2 U	2 U	2.1 U
Safrole	ug/l	NA	10 U	9.8 U	9.7 U	10 U
Sulfotepp	ug/l	NA	0.46 U	0.47 U	0.44 U	0.47 U
Thionazin	ug/l	NA	20 UJ	20 UJ	19 U	20 UJ
Laboratory			DMA	DMA	DMA	DMA

TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds			HAR-07	HAR-07	HAR-07	HAR-16
Well Identifier			---	---	---	Comp
FLUTE Sample Port			---	---	---	---
Sample Date			04/16/03	04/16/03	04/16/03	04/17/03
Sample Type			Primary	Dup	Split	Primary
Sample Qualifier			---	---	---	---
Compound	Units	MCL				
1,2,4,5-Tetrachlorobenzene	ug/l	NA	9.6 U	---	---	9.7 U
1,2,4-Trichlorobenzene	ug/l	70	3.3 U	---	---	3.3 U
1,2-Dichlorobenzene	ug/l	600	3.3 U	---	---	3.3 U
1,3,5-Trinitrobenzene	ug/l	NA	9.6 U	---	---	9.7 U
1,3-Dichlorobenzene	ug/l	600 ACAL	3 U	---	---	3 U
1,3-Dinitrobenzene	ug/l	NA	19 U	---	---	19 U
1,4-Dichlorobenzene	ug/l	5	3.1 U	---	---	3.1 U
1,4-Naphthoquinone	ug/l	NA	19 U	---	---	19 U
1,4-Phenylenediamine	ug/l	NA	48 U	---	---	49 U
1-Naphthylamine	ug/l	NA	9.6 U	---	---	9.7 U
2,3,4,6-Tetrachlorophenol	ug/l	NA	9.6 U	---	---	9.7 U
2,4,5-Trichlorophenol	ug/l	NA	3.8 U	---	---	3.8 U
2,4,6-Trichlorophenol	ug/l	NA	4.3 U	---	---	4.4 U
2,4-Dichlorophenol	ug/l	NA	4.6 U	---	---	4.6 U
2,4-Dimethylphenol	ug/l	100 ACAL	5.8 U	---	---	5.8 U
2,4-Dinitrophenol	ug/l	NA	1.2 U	---	---	1.2 U
2,4-Dinitrotoluene	ug/l	NA	1.2 U	---	---	1.2 U
2,6-Dichlorophenol	ug/l	NA	9.6 U	---	---	9.7 U
2,6-Dinitrotoluene	ug/l	NA	1.8 U	---	---	1.9 U
2-Acetylaminofluorene	ug/l	NA	19 U	---	---	19 U
2-Chloronaphthalene	ug/l	NA	2.9 U	---	---	2.9 U
2-Chlorophenol	ug/l	NA	4.7 U	---	---	4.8 U
2-Methylnaphthalene	ug/l	NA	3.4 U	---	---	3.4 U
2-Methylphenol	ug/l	NA	5.1 U	---	---	5.1 U
2-Naphthylamine	ug/l	NA	9.6 U	---	---	9.7 U
2-Nitroaniline	ug/l	NA	2.5 U	---	---	2.6 U
2-Nitrophenol	ug/l	NA	4.6 U	---	---	4.6 U
2-Picoline	ug/l	NA	9.6 U	---	---	9.7 U
3,3'-Dichlorobenzidine	ug/l	NA	4.8 U	---	---	4.9 U
3,3'-Dimethylbenzidine	ug/l	NA	9.6 U	---	---	9.7 U
3-Methylcholanthrene	ug/l	NA	9.6 U	---	---	9.7 U
3-Methylphenol	ug/l	NA	9.6 U	---	---	9.7 U
3-Nitroaniline	ug/l	NA	3.8 U	---	---	3.8 U
4-Aminobiphenyl	ug/l	NA	19 U	---	---	19 U
4-Bromophenyl phenyl ether	ug/l	NA	2 U	---	---	2 U
4-Chloro-3-methylphenol	ug/l	NA	3.9 U	---	---	3.9 U
4-Chloroaniline	ug/l	NA	2.8 U	---	---	2.8 U
4-Chlorophenyl phenyl ether	ug/l	NA	2.5 U	---	---	2.6 U
4-methylphenol	ug/l	NA	4.3 U	---	---	4.4 U
4-Nitroaniline	ug/l	NA	4.8 U	---	---	4.8 U
4-Nitrophenol	ug/l	NA	1.6 U	---	---	1.6 U
4-Nitroquinoline-1-oxide	ug/l	NA	48 U	---	---	49 U

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See last page of Table XI for footnotes and explanations.

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TABLE XI

SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Semi-Volatile Organic Compounds			HAR-07	HAR-07	HAR-07	HAR-16
Well Identifier			---	---	---	Comp
FLUTe Sample Port			---	---	---	---
Sample Date			04/16/03	04/16/03	04/16/03	04/17/03
Sample Type			Primary	Dup	Split	Primary
Sample Qualifier			---	---	---	---
Compound	Units	MCL				
4,6-Dinitro-2-methylphenol	ug/l	NA	2.1 U	---	---	2.1 U
5-Nitro-o-toluidine	ug/l	NA	9.6 U	---	---	9.7 U
7,12-Dimethylbenz(a)anthracene	ug/l	NA	9.6 U	---	---	9.7 U
Acenaphthene	ug/l	NA	2.5 U	---	---	2.6 U
Acenaphthylene	ug/l	NA	2.4 U	---	---	2.4 U
Acetophenone	ug/l	NA	9.6 U	---	---	9.7 U
Aniline	ug/l	NA	4.8 U	---	---	4.8 U
Anthracene	ug/l	NA	0.77 U	---	---	0.78 U
Aramite	ug/l	NA	190 U	---	---	190 U
Benzo (b+k) fluoranthene (total)	ug/l	NA	1.7 UJ	---	---	1.7 U
Benzo(a)anthracene	ug/l	NA	0.51 U	---	---	0.51 U
Benzo(a)pyrene	ug/l	0.2	0.93 U	---	---	0.94 U
Benzo(ghi)perylene	ug/l	NA	0.94 U	---	---	0.95 U
Benzyl Alcohol	ug/l	NA	3 U	---	---	3 U
Bis(2-Chloroethoxy)methane	ug/l	NA	3.5 U	---	---	3.5 U
Bis(2-chloroethyl)ether	ug/l	NA	3.5 UJ	---	---	3.5 U
Bis(2-chloroisopropyl)ether	ug/l	NA	3.9 U	---	---	3.9 U
Bis(2-Ethylhexyl) phthalate	ug/l	4	3.5 U	---	---	3.5 U
Butyl benzyl phthalate	ug/l	NA	0.88 U	---	---	0.88 U
Chrysene	ug/l	NA	0.92 U	---	---	0.93 U
Di-n-butyl phthalate	ug/l	NA	0.88 U	---	---	0.89 U
Di-n-octyl phthalate	ug/l	NA	0.89 UJ	---	---	0.9 U
Dibenz(a,h)anthracene	ug/l	NA	0.86 U	---	---	0.86 U
Dibenzofuran	ug/l	NA	2.4 U	---	---	2.5 U
Diethyl phthalate	ug/l	NA	1.2 U	---	---	1.2 U
Dimethoate	ug/l	1 ACAL	0.32 U	---	---	19 U
Dimethyl phthalate	ug/l	NA	1.8 U	---	---	1.8 U
Diphenylamine	ug/l	NA	9.6 U	---	---	9.7 U
Disulfoton	ug/l	NA	0.14 U	---	---	---
Ethyl methanesulfonate	ug/l	NA	19 U	---	---	19 U
Famphur	ug/l	NA	190 U	---	---	190 U
Fluoranthene	ug/l	NA	0.75 U	---	---	0.76 U
Fluorene	ug/l	NA	2.5 U	---	---	2.6 U
Hexachlorobenzene	ug/l	1	1.7 U	---	---	1.7 U
Hexachlorobutadiene	ug/l	NA	3 U	---	---	3 U
Hexachlorocyclopentadiene	ug/l	50	1.3 UJ	---	---	1.3 U
Hexachloroethane	ug/l	NA	2.3 U	---	---	2.3 U
Hexachlorophene	ug/l	NA	190 U	---	---	190 U
Hexachloropropene	ug/l	NA	9.6 U	---	---	9.7 U
Indeno(1,2,3-cd)pyrene	ug/l	NA	0.75 U	---	---	0.76 U
Isophorone	ug/l	NA	3.1 U	---	---	3.1 U
Isosafrole	ug/l	NA	9.6 U	---	---	9.7 U

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See last page of Table XI for footnotes and explanations.

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TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds			HAR-07	HAR-07	HAR-07	HAR-16
Well Identifier			---	---	---	Comp
FLUTE Sample Port			---	---	---	04/17/03
Sample Date			04/16/03	04/16/03	04/16/03	04/17/03
Sample Type			Primary	Dup	Split	Primary
Sample Qualifier			---	---	---	---
Compound	Units	MCL				
Methapyrilene	ug/l	NA	96 U	---	---	97 U
Methyl methanesulfonate	ug/l	NA	9.6 U	---	---	9.7 U
N-Nitrosodi-n-butylamine	ug/l	NA	9.6 U	---	---	9.7 U
N-Nitrosodi-n-propylamine	ug/l	NA	3.5 U	---	---	3.6 U
N-Nitrosodiethylamine	ug/l	NA	19 U	---	---	19 U
N-Nitrosodimethylamine	ng/l	10 ACAL	55	51	54	18000 J
N-Nitrosodiphenylamine	ug/l	NA	2.6 U	---	---	2.7 U
N-Nitrosomethylethylamine	ug/l	NA	9.6 U	---	---	9.7 U
N-Nitrosomorpholine	ug/l	NA	9.6 U	---	---	9.7 U
N-Nitrosopiperidine	ug/l	NA	19 U	---	---	19 U
N-Nitrosopyrrolidine	ug/l	NA	38 U	---	---	39 U
Naphthalene	ug/l	170 ACAL	3.7 U	---	---	3.7 U
Nitrobenzene	ug/l	NA	3.2 U	---	---	3.2 U
O,O,O-Triethylphosphorothioate	ug/l	NA	9.6 U	---	---	9.7 U
o-Toluidine	ug/l	NA	9.6 U	---	---	9.7 U
p-Dimethylaminoazobenzene	ug/l	NA	9.6 U	---	---	9.7 U
Parathion-ethyl	ug/l	40 ACAL	0.14 U	---	---	---
Parathion-methyl	ug/l	2 ACAL	0.12 U	---	---	---
Pentachlorobenzene	ug/l	NA	9.6 U	---	---	9.7 U
Pentachloroethane	ug/l	NA	9.6 U	---	---	9.7 U
Pentachloronitrobenzene	ug/l	20 ACAL	19 U	---	---	19 U
Pentachlorophenol	ug/l	1	0.165 U	---	---	2 U
Phenacetin	ug/l	NA	19 U	---	---	19 U
Phenanthrene	ug/l	NA	1.4 U	---	---	1.4 U
Phenol	ug/l	4200 ACAL	3.8 U	---	---	3.9 U
a,a-Dimethylphenethylamine	ug/l	NA	9.6 U	---	---	9.7 U
Phorate	ug/l	NA	0.13 U	---	---	---
Pronamide	ug/l	NA	9.6 U	---	---	9.7 U
Pyrene	ug/l	NA	0.69 U	---	---	0.7 U
Pyridine	ug/l	NA	2 U	---	---	2 U
Safrole	ug/l	NA	9.6 U	---	---	9.7 U
Sulfotepp	ug/l	NA	0.44 U	---	---	---
Thionazin	ug/l	NA	19 UJ	---	---	19 U
Laboratory			DMA	Weck	DMA	DMA

TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds				
Well Identifier			HAR-17	HAR-17
FLUTe Sample Port			---	---
Sample Date			04/16/03	04/16/03
Sample Type			Primary	Dup
Sample Qualifier			---	---
Compound	Units	MCL		
1,2,4,5-Tetrachlorobenzene	ug/l	NA	9.7 U	---
1,2,4-Trichlorobenzene	ug/l	70	3.3 U	---
1,2-Dichlorobenzene	ug/l	600	0.32 U	0.32 U
1,3,5-Trinitrobenzene	ug/l	NA	9.7 U	---
1,3-Dichlorobenzene	ug/l	600 ACAL	0.35 U	0.35 U
1,3-Dinitrobenzene	ug/l	NA	19 U	---
1,4-Dichlorobenzene	ug/l	5	0.37 U	0.37 U
1,4-Naphthoquinone	ug/l	NA	19 U	---
1,4-Phenylenediamine	ug/l	NA	49 U	---
1-Naphthylamine	ug/l	NA	9.7 U	---
2,3,4,6-Tetrachlorophenol	ug/l	NA	9.7 U	---
2,4,5-Trichlorophenol	ug/l	NA	3.8 U	---
2,4,6-Trichlorophenol	ug/l	NA	4.4 U	---
2,4-Dichlorophenol	ug/l	NA	4.6 U	---
2,4-Dimethylphenol	ug/l	100 ACAL	5.8 U	---
2,4-Dinitrophenol	ug/l	NA	1.2 U	---
2,4-Dinitrotoluene	ug/l	NA	1.2 U	---
2,6-Dichlorophenol	ug/l	NA	9.7 U	---
2,6-Dinitrotoluene	ug/l	NA	1.9 U	---
2-Acetylaminofluorene	ug/l	NA	19 U	---
2-Chloronaphthalene	ug/l	NA	2.9 U	---
2-Chlorophenol	ug/l	NA	4.8 U	---
2-Methylnaphthalene	ug/l	NA	3.4 U	---
2-Methylphenol	ug/l	NA	5.1 U	---
2-Naphthylamine	ug/l	NA	9.7 U	---
2-Nitroaniline	ug/l	NA	2.6 U	---
2-Nitrophenol	ug/l	NA	4.6 U	---
2-Picoline	ug/l	NA	9.7 U	---
3,3'-Dichlorobenzidine	ug/l	NA	4.9 U	---
3,3'-Dimethylbenzidine	ug/l	NA	9.7 U	---
3-Methylcholanthrene	ug/l	NA	9.7 U	---
3-Methylphenol	ug/l	NA	9.7 U	---
3-Nitroaniline	ug/l	NA	3.8 U	---
4-Aminobiphenyl	ug/l	NA	19 U	---
4-Bromophenyl phenyl ether	ug/l	NA	2 U	---
4-Chloro-3-methylphenol	ug/l	NA	3.9 U	---
4-Chloroaniline	ug/l	NA	2.8 U	---
4-Chlorophenyl phenyl ether	ug/l	NA	2.6 U	---
4-methylphenol	ug/l	NA	4.4 U	---
4-Nitroaniline	ug/l	NA	4.8 U	---
4-Nitrophenol	ug/l	NA	1.6 U	---
4-Nitroquinoline-1-oxide	ug/l	NA	49 U	---

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See last page of Table XI for footnotes and explanations.

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TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds				
Well Identifier			HAR-17	HAR-17
FLUTe Sample Port			---	---
Sample Date			04/16/03	04/16/03
Sample Type			Primary	Dup
Sample Qualifier			---	---
Compound	Units	MCL		
4,6-Dinitro-2-methylphenol	ug/l	NA	2.1 U	---
5-Nitro-o-toluidine	ug/l	NA	9.7 U	---
7,12-Dimethylbenz(a)anthracene	ug/l	NA	9.7 U	---
Acenaphthene	ug/l	NA	2.6 U	---
Acenaphthylene	ug/l	NA	2.4 U	---
Acetophenone	ug/l	NA	9.7 U	---
Aniline	ug/l	NA	4.8 U	---
Anthracene	ug/l	NA	0.78 U	---
Aramite	ug/l	NA	190 U	---
Benzo (b+k) fluoranthene (total)	ug/l	NA	1.7 UJ	---
Benzo(a)anthracene	ug/l	NA	0.51 U	---
Benzo(a)pyrene	ug/l	0.2	0.94 U	---
Benzo(ghi)perylene	ug/l	NA	0.95 U	---
Benzyl Alcohol	ug/l	NA	3 U	---
Bis(2-Chloroethoxy)methane	ug/l	NA	3.5 U	---
Bis(2-chloroethyl)ether	ug/l	NA	3.5 UJ	---
Bis(2-chloroisopropyl)ether	ug/l	NA	3.9 U	---
Bis(2-Ethylhexyl) phthalate	ug/l	4	3.5 UJ	---
Butyl benzyl phthalate	ug/l	NA	0.88 U	---
Chrysene	ug/l	NA	0.93 U	---
Di-n-butyl phthalate	ug/l	NA	0.89 U	---
Di-n-octyl phthalate	ug/l	NA	0.9 UJ	---
Dibenz(a,h)anthracene	ug/l	NA	0.86 U	---
Dibenzofuran	ug/l	NA	2.5 U	---
Diethyl phthalate	ug/l	NA	1.2 U	---
Dimethoate	ug/l	1 ACAL	0.32 U	---
Dimethyl phthalate	ug/l	NA	1.8 U	---
Diphenylamine	ug/l	NA	9.7 U	---
Disulfoton	ug/l	NA	0.14 U	---
Ethyl methanesulfonate	ug/l	NA	19 U	---
Famphur	ug/l	NA	190 U	---
Fluoranthene	ug/l	NA	0.76 U	---
Fluorene	ug/l	NA	2.6 U	---
Hexachlorobenzene	ug/l	1	1.7 U	---
Hexachlorobutadiene	ug/l	NA	3 U	---
Hexachlorocyclopentadiene	ug/l	50	1.3 UJ	---
Hexachloroethane	ug/l	NA	2.3 U	---
Hexachlorophene	ug/l	NA	190 U	---
Hexachloropropene	ug/l	NA	9.7 U	---
Indeno(1,2,3-cd)pyrene	ug/l	NA	0.76 U	---
Isophorone	ug/l	NA	3.1 U	---
Isosafrole	ug/l	NA	9.7 U	---

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See last page of Table XI for footnotes and explanations.

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TABLE XI
SUMMARY OF ANALYSES FOR APPENDIX IX CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Semi-Volatile Organic Compounds				
Well Identifier			HAR-17	HAR-17
FLUTe Sample Port			---	---
Sample Date			04/16/03	04/16/03
Sample Type			Primary	Dup
Sample Qualifier			---	---
Compound	Units	MCL		
Methapyrilene	ug/l	NA	97 U	---
Methyl methanesulfonate	ug/l	NA	9.7 U	---
N-Nitrosodi-n-butylamine	ug/l	NA	9.7 U	---
N-Nitrosodi-n-propylamine	ug/l	NA	3.6 U	---
N-Nitrosodiethylamine	ug/l	NA	19 U	---
N-Nitrosodimethylamine	ng/l	10 ACAL	33	---
N-Nitrosodiphenylamine	ug/l	NA	2.7 U	---
N-Nitrosomethylethylamine	ug/l	NA	9.7 U	---
N-Nitrosomorpholine	ug/l	NA	9.7 U	---
N-Nitrosopiperidine	ug/l	NA	19 U	---
N-Nitrosopyrrolidine	ug/l	NA	39 U	---
Naphthalene	ug/l	170 ACAL	3.7 U	---
Nitrobenzene	ug/l	NA	3.2 U	---
O,O,O-Triethylphosphorothioate	ug/l	NA	9.7 U	---
o-Toluidine	ug/l	NA	9.7 U	---
p-Dimethylaminoazobenzene	ug/l	NA	9.7 U	---
Parathion-ethyl	ug/l	40 ACAL	0.14 U	---
Parathion-methyl	ug/l	2 ACAL	0.12 U	---
Pentachlorobenzene	ug/l	NA	9.7 U	---
Pentachloroethane	ug/l	NA	9.7 U	---
Pentachloronitrobenzene	ug/l	20 ACAL	19 U	---
Pentachlorophenol	ug/l	1	0.165 U	---
Phenacetin	ug/l	NA	19 U	---
Phenanthrene	ug/l	NA	1.4 U	---
Phenol	ug/l	4200 ACAL	3.9 U	---
a,a-Dimethylphenethylamine	ug/l	NA	9.7 U	---
Phorate	ug/l	NA	0.13 U	---
Pronamide	ug/l	NA	9.7 U	---
Pyrene	ug/l	NA	0.7 U	---
Pyridine	ug/l	NA	2 U	---
Safrole	ug/l	NA	9.7 U	---
Sulfotepp	ug/l	NA	0.44 U	---
Thionazin	ug/l	NA	19 U	---
Laboratory			DMA	DMA

TABLE XI
FOOTNOTES AND EXPLANATIONS

AMA	=	American Analytics of Chatsworth, California.
DMA	=	Del Mar Analytical of Irvine, California.
Weck	=	Weck Laboratories of City of Industry, California.
(---)	=	Analysis not performed.
Primary	=	Primary sample.
Dup	=	Duplicate sample.
Split	=	Split sample.
mg/l	=	Milligrams per liter.
ug/l	=	Micrograms per liter.
ng/l	=	Nanograms per liter.
pg/l	=	Picograms per liter.
MCL	=	Maximum Contaminant Level, California primary drinking water standard (California Department of Health Services, 2003. http://www.dhs.ca.gov/ps/ddwem/publications/regulations/MCLrevisions6-12-03.pdf).
SMCL	=	Secondary drinking water MCL.
ECAL	=	Enforceable California Action Level to be met at a customer tap.
ACAL	=	Advisory California Action Level for unregulated chemical contaminants.
NA	=	Not available; no MCL promulgated.
C	=	Possible carry-over contaminant.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range (see Appendix D for details).
Comp	=	Composite sample. The HAR-16 sample was composited at the laboratory from FLUTE ports 7 through 12.
TEQ	=	Toxicity equivalent.
pH	=	VOC samples, pH of preserved sample did not meet the method preservation requirements.

Notes:

Low-level 1,4-dioxane analyses were performed by Ceimic Corporation using modified EPA method 8260 SIM.

Low-level N-nitrosodimethylamine analyses were performed by Weck Laboratories for primary samples and by Del Mar Analytical for split samples using modified EPA method 1625.

TABLE XII
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier		OS-28	OS-28	OS-28	OS-28	OS-28	OS-28	OS-28	OS-28	OS-28
FLUTe Sample Port		---	---	---	---	---	---	---	---	---
Sample Date		08/22/03	08/22/03	08/22/03	08/22/03	09/18/03	09/18/03	09/18/03	12/16/03	12/16/03
Sample Type		Primary	Dup	Split	Split Dup	Primary	Dup	Dup	Primary	Split
Qualifier	Units	---	---	---	---	---	---	---	---	---
Organic Constituents and Perchlorate										
1,1,1-Trichloroethane	ug/l	0.3 U	0.3 U	---	---	0.3 U	---	---	---	---
1,1,2-Trichloroethane	ug/l	0.3 U	0.3 U	---	---	0.3 U	---	---	---	---
1,1-Dichloroethane	ug/l	0.27 U	0.27 U	---	---	0.27 U	---	---	---	---
1,1-Dichloroethene	ug/l	0.32 U	0.32 U	---	---	0.32 U	---	---	---	---
1,2-Dichloroethane	ug/l	0.28 U	0.28 U	---	---	0.28 U	---	---	---	---
1,3-Dinitrobenzene	ug/l	8.4 U	---	---	---	8.4 U	---	---	---	---
1,4-Dioxane	ug/l	0.07 U	0.07 U	---	---	0.07 U	---	---	---	---
2-Butanone	ug/l	3.8 U	3.8 U	---	---	3.8 U	---	---	---	---
Acetone	ug/l	4.5 U	4.5 U	---	---	4.5 U	---	---	---	---
Benzene	ug/l	0.28 U	0.28 U	---	---	0.28 U	---	---	---	---
Carbon tetrachloride	ug/l	0.28 U	0.28 U	---	---	0.28 U	---	---	---	---
Chloroform	ug/l	0.33 U	0.33 U	---	---	0.33 U	---	---	---	---
cis-1,2-Dichloroethene	ug/l	0.32 U	0.32 U	---	---	0.32 U	---	---	---	---
Ethylbenzene	ug/l	0.25 U	0.25 U	---	---	0.25 U	---	---	---	---
m,p-Xylenes	ug/l	0.52 U	0.52 U	---	---	0.52 U	---	---	---	---
Methylene chloride	ug/l	0.9 U	0.89 U	---	---	0.48 U	---	---	---	---
n-Nitrosodimethylamine	ug/l	0.012 R	0.0007 U	0.002 U	0.002 U	0.0057 R	0.0028 U	0.006 J	0.002	0.0036
Nitrobenzene	ug/l	2.7 U	2.7 U	---	---	2.7 U	---	---	---	---
o-Xylene	ug/l	0.24 U	0.24 U	---	---	0.24 U	---	---	---	---
Perchlorate	ug/l	0.8 U	---	---	---	0.8 U	---	---	---	---
Tetrachloroethene	ug/l	0.32 U	0.32 U	---	---	0.32 U	---	---	---	---
Toluene	ug/l	0.36 U	0.36 U	---	---	0.36 U	---	---	---	---
trans-1,2-Dichloroethene	ug/l	0.27 U	0.27 U	---	---	0.27 U	---	---	---	---
Trichloroethene	ug/l	0.26 U	0.26 U	---	---	0.26 U	---	---	---	---
Trichlorofluoromethane	ug/l	0.34 U	0.34 U	---	---	0.34 U	---	---	---	---
Trichlorotrifluoroethane (Freon 113)	ug/l	1.2 U	1.2 U	---	---	1.2 U	---	---	---	---
Vinyl chloride	ug/l	0.26 U	0.26 U	---	---	0.26 U	---	---	---	---
Naturally Occurring Constituents										
Ammonia-N	mg/l	---	---	---	---	---	---	---	---	---
Fluoride	mg/l	0.53	0.5	---	---	---	---	---	---	---
Formaldehyde	ug/l	---	---	---	---	---	---	---	---	---
Nitrate-N	mg/l	0.072 U	0.072 U	---	---	---	---	---	---	---
Laboratory		DMA	DMA	Weck	Weck	DMA	Weck	Weck	Pacific	Pacific

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SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier		RD-01	RD-02	RD-02	RD-02	RD-02	RD-02	RD-02	RD-04	RD-04	RD-04
FLUTe Sample Port		---	---	---	---	---	---	---	---	---	---
Sample Date		05/07/03	02/04/03	05/05/03	08/11/03	08/11/03	11/19/03	11/19/03	02/03/03	05/07/03	05/07/03
Sample Type		Primary	Primary	Primary	Primary	Dup	Primary	Dup	Primary	Primary	Split
Qualifier	Units	---	---	---	---	---	---	---	---	---	---
Organic Constituents and Perchlorate											
1,1,1-Trichloroethane	ug/l	3 U	0.6 U	1.5 U	3 U	---	0.3 U	1.5 U	0.3 U	0.3 U	---
1,1,2-Trichloroethane	ug/l	3 U	0.6 U	1.5 U	3 U	---	0.3 U	1.5 U	0.3 U	0.3 U	---
1,1-Dichloroethane	ug/l	2.7 U	0.54 U	1.4 U	2.7 U	---	0.27 U	1.4 U	0.27 U	0.27 U	---
1,1-Dichloroethene	ug/l	3.2 U	1.4 J	1.6 U	3.2 U	---	1.5	1.8 J	0.32 U	0.32 U	---
1,2-Dichloroethane	ug/l	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U	0.28 U	0.28 U	---
1,3-Dinitrobenzene	ug/l	8.4 U	8.4 U	8.4 U	8.4 U	---	8.4 U	---	8.4 U	8.4 U	---
1,4-Dioxane	ug/l	2.67	1.82 J	2.32	1.52	1.64	1.8 U	---	0.265 J	0.331 U	0.45 U
2-Butanone	ug/l	38 U	7.6 U	19 U	38 U	---	3.8 U	19 U	3.8 U	3.8 U	---
Acetone	ug/l	45 U	9 U	22 U	45 U	---	4.5 U	22 U	4.5 U	4.5 U	---
Benzene	ug/l	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U	0.28 U	0.28 U	---
Carbon tetrachloride	ug/l	2.8 U	0.56 U	1.4 U	2.8 U	---	0.28 U	1.4 U	0.28 U	0.28 U	---
Chloroform	ug/l	3.3 U	0.66 U	1.6 U	3.3 U	---	0.33 U	1.6 U	0.33 U	0.33 U	---
cis-1,2-Dichloroethene	ug/l	690	360	390	490	---	440	450	13	13	---
Ethylbenzene	ug/l	2.5 U	0.5 U	1.2 U	2.5 U	---	0.25 U	1.2 U	0.25 U	0.25 U	---
m,p-Xylenes	ug/l	3.8 U	0.76 U	1.9 U	5.2 U	---	0.52 U	2.6 U	0.38 U	0.38 U	---
Methylene chloride	ug/l	5.7 J	0.66 U	1.6 U	7.6 J,L	---	0.48 U	2.4 U	0.33 U	0.33 U	---
n-Nitrosodimethylamine	ug/l	0.0007 U	0.0058	0.0062	0.0074	---	3 U	---	0.0005 U	0.038	---
Nitrobenzene	ug/l	9.6 U	9.6 U	9.6 U	2.7 U	---	2.7 U	---	9.6 U	9.6 U	---
o-Xylene	ug/l	2.4 U	0.48 U	1.2 U	2.4 U	---	0.24 U	1.2 U	0.24 U	0.24 U	---
Perchlorate	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	---	0.8 U	---	0.8 U	0.8 U	---
Tetrachloroethene	ug/l	3.2 U	0.64 U	1.6 U	3.2 U	---	0.32 U	1.6 U	0.32 U	0.32 U	---
Toluene	ug/l	4.9 U	0.98 U	2.4 U	3.6 U	---	0.36 U	1.8 U	0.49 U	0.49 U	---
trans-1,2-Dichloroethene	ug/l	23	27	24	28	---	25	26	0.32 J	0.28 J	---
Trichloroethene	ug/l	970	330	330	350	---	280	290	62	60	---
Trichlorofluoromethane	ug/l	3.4 U	0.68 U	1.7 U	3.4 U	---	0.34 U	1.7 U	0.34 U	0.34 U	---
Trichlorotrifluoroethane (Freon 113)	ug/l	12 U	2.4 U	6 U	12 U	---	1.2 U	6 U	1.2 U	1.2 U	---
Vinyl chloride	ug/l	6	10	7.5	6.5	---	7.2	6.9	0.19 U	0.19 U	---
Naturally Occurring Constituents											
Ammonia-N	mg/l	0.11 U	0.087 U	---	0.11 U	---	0.11 U	---	0.087 U	0.11 U	---
Fluoride	mg/l	0.44 J	0.25 J	0.4 J	0.42 J	---	0.4 J	---	0.26 J	0.45 J	---
Formaldehyde	ug/l	21 J,L	20 U	20 U	20 U	---	---	---	20 U	20 U	---
Nitrate-N	mg/l	0.17	0.072 U	0.072 U	0.072 U	---	0.072 U	---	0.072 U	0.14 U	---
Laboratory		DMA	DMA	DMA	DMA	Ceimic	DMA	DMA	DMA	DMA	DMA

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TABLE XII
SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier		RD-04	RD-04	RD-10	RD-10	RD-44	RD-44	RD-44	RD-44	RD-49A	RD-49A
FLUTE Sample Port		---	---	Comp	Comp	---	---	---	---	---	---
Sample Date		08/20/03	11/20/03	01/28/03	04/30/03	02/04/03	02/04/03	05/06/03	08/11/03	02/04/03	02/04/03
Sample Type		Primary	Primary	Primary	Primary	Primary	Dup	Primary	Primary	Primary	Dup
Qualifier	Units	---	---	---	---	---	---	---	---	---	---
Organic Constituents and Perchlorate											
1,1,1-Trichloroethane	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	---	0.3 U	0.3 U	12 U	12 U
1,1,2-Trichloroethane	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	0.3 U	---	0.3 U	0.3 U	12 U	12 U
1,1-Dichloroethane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	0.27 U	---	0.27 U	0.27 U	11 U	11 U
1,1-Dichloroethene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	---	0.32 U	0.32 U	13 U	13 U
1,2-Dichloroethane	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U	0.28 U	11 U	11 U
1,3-Dinitrobenzene	ug/l	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	---	8.4 U	8.4 U	8.4 U	---
1,4-Dioxane	ug/l	0.249 U	0.07 U	0.448 J	0.07 U	0.07 U	0.07 U	0.147 U	0.07 U	0.414 J	---
2-Butanone	ug/l	3.8 U	3.8 U	3.8 U	3.8 U	3.8 U	---	3.8 U	3.8 U	150 U	150 U
Acetone	ug/l	4.5 U	4.5 J,L	4.5 U	9.4 J,F	4.5 U	---	4.5 U	4.5 U	180 U	180 U
Benzene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U	0.28 U	11 U	11 U
Carbon tetrachloride	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	0.28 U	---	0.28 U	0.28 U	11 U	11 U
Chloroform	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	0.33 U	---	0.33 U	0.33 U	13 U	13 U
cis-1,2-Dichloroethene	ug/l	14	14	13	12	0.32 U	---	0.32 U	0.32 U	2000	2200
Ethylbenzene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U	---	0.25 U	0.25 U	10 U	10 U
m,p-Xylenes	ug/l	0.52 U	0.52 U	0.38 U	0.38 U	0.38 U	---	0.38 U	0.52 U	15 U	15 U
Methylene chloride	ug/l	0.48 U	2.8 J,L	0.33 U	0.33 U	0.33 U	---	0.33 U	0.48 U	20 J,L	13 J,L
n-Nitrosodimethylamine	ug/l	0.0024 U	3 U	0.0005 U	0.0007 U	0.0005 U	---	0.0007 U	0.00081 J	0.0005 U	---
Nitrobenzene	ug/l	2.7 U	2.7 U	9.6 U	9.6 U	9.6 U	---	9.6 U	2.7 U	9.6 U	---
o-Xylene	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	0.24 U	---	0.24 U	0.24 U	9.6 U	9.6 U
Perchlorate	ug/l	0.8 U	0.8 U	160	220	0.8 U	---	0.8 U	0.8 U	0.8 U	---
Tetrachloroethene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	---	0.32 U	0.32 U	13 U	13 U
Toluene	ug/l	0.36 U	0.36 U	0.49 U	0.49 U	0.49 U	---	0.49 U	0.36 U	20 U	20 U
trans-1,2-Dichloroethene	ug/l	0.41 J	0.33 J	0.46 J	0.47 J,F	0.27 U	---	0.27 U	0.27 U	46	51
Trichloroethene	ug/l	71	79	6.6	4.9	0.26 U	---	0.26 U	0.26 U	4100	4400
Trichlorofluoromethane	ug/l	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	---	0.34 U	0.34 U	14 U	14 U
Trichlorotrifluoroethane (Freon 113)	ug/l	1.2 U	1.2 U	1.2 U	1.2 U	1.2 U	---	1.2 U	1.2 U	48 U	48 U
Vinyl chloride	ug/l	0.26 U	0.26 U	0.19 U	0.19 U	0.19 U	---	0.19 U	0.26 U	7.6 U	7.6 U
Naturally Occurring Constituents											
Ammonia-N	mg/l	0.11 U	0.11 U	0.13 J	0.11 U	0.087 U	--	0.11 U	0.11 U	0.087 U	---
Fluoride	mg/l	0.46 J	0.31 J	0.37 J	0.31 J	0.32 J	--	0.45 J	0.49 J	0.43 J	---
Formaldehyde	ug/l	20 U	25 U	20 U	20 U	20 U	--	20 U	20 U	20 U	---
Nitrate-N	mg/l	0.072 U	0.072 U	0.2	0.28	0.072 U	--	0.072 U	0.072 U	0.072 U	---
Laboratory		DMA	DMA	DMA	DMA	DMA	Ceimic	DMA	DMA	DMA	DMA

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SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier		RD-49A	RD-49A	RD-49A	RD-49A	RD-49B	RD-49B	RD-49B	RD-49B	RD-49B	RD-49B
FLUTe Sample Port		---	---	---	---	---	---	---	---	---	---
Sample Date		05/07/03	05/07/03	08/11/03	11/18/03	02/03/03	05/06/03	05/06/03	08/11/03	11/17/03	11/17/03
Sample Type		Primary	Split	Primary	Primary	Primary	Primary	Split	Primary	Primary	Dup
Qualifier	Units	---	---	---	---	---	---	---	---	---	---
Organic Constituents and Perchlorate											
1,1,1-Trichloroethane	ug/l	30 U	---	12 U	12 U	0.3 U	0.6 U	---	0.6 U	1.2 U	---
1,1,2-Trichloroethane	ug/l	30 U	---	12 U	12 U	0.3 U	0.6 U	---	0.6 U	1.2 U	---
1,1-Dichloroethane	ug/l	27 U	---	11 U	11 U	0.27 U	0.54 U	---	0.54 U	1.1 U	---
1,1-Dichloroethene	ug/l	32 U	---	13 U	13 U	0.49 J	0.64 U	---	0.64 U	1.3 U	---
1,2-Dichloroethane	ug/l	28 U	---	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U	---
1,3-Dinitrobenzene	ug/l	8.4 U	---	8.4 U	8.4 U	8.4 U	8.4 U	---	8.4 U	8.4 U	---
1,4-Dioxane	ug/l	0.65 J	0.73 U	0.07 U	0.68 U	1.5 J	2.76	2.4 U	1.5	2.3	1.8 U
2-Butanone	ug/l	380 U	---	150 U	150 U	3.8 U	7.6 U	---	7.6 U	15 U	---
Acetone	ug/l	450 U	---	180 U	180 U	4.5 U	9 U	---	9 U	18 U	---
Benzene	ug/l	28 U	---	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U	---
Carbon tetrachloride	ug/l	28 U	---	11 U	11 U	0.28 U	0.56 U	---	0.56 U	1.1 U	---
Chloroform	ug/l	33 U	---	13 U	13 U	0.33 U	0.66 U	---	0.66 U	1.3 U	---
cis-1,2-Dichloroethene	ug/l	2100	---	3400	2000 J	180	220	---	280	260	---
Ethylbenzene	ug/l	25 U	---	10 U	10 U	0.25 U	0.5 U	---	0.5 U	1 U	---
m,p-Xylenes	ug/l	38 U	---	21 U	21 U	0.38 U	0.76 U	---	1 U	2.1 U	---
Methylene chloride	ug/l	55 J,L	---	19 U	19 U	0.33 U	0.66 U	---	0.96 U	1.9 U	---
n-Nitrosodimethylamine	ug/l	0.0018 J	---	0.0028	3 U	0.051	0.049	---	0.066	3 U	---
Nitrobenzene	ug/l	9.6 U	---	2.7 U	2.7 U	9.6 U	9.6 U	---	2.7 U	2.7 U	---
o-Xylene	ug/l	24 U	---	9.6 U	9.6 U	0.24 U	0.48 U	---	0.48 U	0.96 U	---
Perchlorate	ug/l	0.8 U	---	0.8 U	0.8 U	0.8 U	0.8 U	---	0.8 U	0.8 U	---
Tetrachloroethene	ug/l	32 U	---	13 U	13 U	0.32 U	0.64 U	---	0.64 U	1.3 U	---
Toluene	ug/l	49 U	---	14 U	14 U	0.49 U	0.98 U	---	0.72 U	1.4 U	---
trans-1,2-Dichloroethene	ug/l	40 J	---	60	42	12	11	---	14	14	---
Trichloroethene	ug/l	4000	---	2300	3900	290	250	---	270	350	---
Trichlorofluoromethane	ug/l	34 U	---	14 U	14 U	0.34 U	0.68 U	---	0.68 U	1.4 U	---
Trichlorotrifluoroethane (Freon 113)	ug/l	120 U	---	48 U	48 UJ	18	2.4 U	---	2.4 U	4.8 U	---
Vinyl chloride	ug/l	19 U	---	10 U	10 U	4.8	5.8	---	6	7.4	---
Naturally Occurring Constituents											
Ammonia-N	mg/l	0.11 U	---	0.11 U	0.11 U	0.087 U	0.11 U	---	0.11 U	0.11 U	---
Fluoride	mg/l	0.57 J	---	0.63	0.37 J	0.32 J	0.28 J	---	0.29 J	0.3 J	---
Formaldehyde	ug/l	20 U	---	20 U	21 J	20 U	20 U	---	20 U	20 U	---
Nitrate-N	mg/l	0.14 U	---	0.072 U	0.072 U	0.072 U	0.072 U	---	0.072 U	0.072 U	---
Laboratory		DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA	Ceimic

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SUMMARY OF ANALYSES FOR CONSTITUENTS OF CONCERN AND PERCHLORATE, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier		RD-49B	RD-49C	RD-49C	RD-49C	RD-49C	RD-49C	RD-49C	WS-05	WS-05	WS-05
FLUTE Sample Port		---	---	---	---	---	---	---	---	---	---
Sample Date		11/17/03	02/04/03	05/06/03	08/19/03	11/18/03	11/18/03	11/18/03	02/04/03	05/05/03	05/05/03
Sample Type		Split	Primary	Primary	Primary	Primary	Dup	Split	Primary	Primary	Split
Qualifier	Units	---	---	---	---	---	---	---	---	---	---
Organic Constituents and Perchlorate											
1,1,1-Trichloroethane	ug/l	---	0.3 U	0.3 U	0.3 U	0.3 U	---	---	0.3 U	0.3 U	---
1,1,2-Trichloroethane	ug/l	---	0.3 U	0.3 U	0.3 U	0.3 U	---	---	0.3 U	0.3 U	---
1,1-Dichloroethane	ug/l	---	0.27 U	0.27 U	0.27 U	0.27 U	---	---	0.27 U	0.27 U	---
1,1-Dichloroethene	ug/l	---	0.32 U	0.32 U	0.32 U	0.32 U	---	---	0.32 U	0.32 U	---
1,2-Dichloroethane	ug/l	---	0.28 U	0.28 U	0.28 U	0.28 U	---	---	0.28 U	0.28 U	---
1,3-Dinitrobenzene	ug/l	---	8.4 U	8.4 U	8.4 U	8.4 U	---	---	8.4 U	8.4 U	---
1,4-Dioxane	ug/l	0.93 J	0.815 J	1.08	0.755 U	0.6 U	0.74 U	0.49 U	2.17 J	2.38	2.6 U
2-Butanone	ug/l	---	3.8 U	3.8 U	3.8 U	3.8 U	---	---	3.8 U	3.8 U	---
Acetone	ug/l	---	4.5 U	4.5 U	4.5 U	4.5 U	---	---	4.5 U	4.5 U	---
Benzene	ug/l	---	0.28 U	0.28 U	0.28 U	0.28 U	---	---	0.28 U	0.28 U	---
Carbon tetrachloride	ug/l	---	0.28 U	0.28 U	0.28 U	0.28 U	---	---	0.28 U	0.28 U	---
Chloroform	ug/l	---	0.33 U	0.33 U	0.33 U	0.33 U	---	---	0.33 U	0.33 U	---
cis-1,2-Dichloroethene	ug/l	---	77	81	75	75 J	---	---	2.9	2.6	---
Ethylbenzene	ug/l	---	0.25 U	0.25 U	0.25 U	0.25 U	---	---	0.25 U	0.25 U	---
m,p-Xylenes	ug/l	---	0.38 U	0.38 U	0.52 U	0.52 U	---	---	0.38 U	0.38 U	---
Methylene chloride	ug/l	---	0.33 U	0.33 U	0.48 U	0.48 U	---	---	0.33 U	0.33 U	---
n-Nitrosodimethylamine	ug/l	---	0.014	0.014	0.013	3 U	---	---	0.0005 U	0.0007 U	---
Nitrobenzene	ug/l	---	9.6 U	9.6 U	2.7 U	2.7 U	---	---	9.6 U	9.6 U	---
o-Xylene	ug/l	---	0.24 U	0.24 U	0.24 U	0.24 U	---	---	0.24 U	0.24 U	---
Perchlorate	ug/l	---	0.8 U	0.8 U	0.8 U	0.8 U	---	---	0.8 U	0.8 U	---
Tetrachloroethene	ug/l	---	0.32 U	0.32 U	0.32 U	0.32 U	---	---	0.32 U	0.32 U	---
Toluene	ug/l	---	0.49 U	0.49 U	0.36 U	0.36 U	---	---	0.49 U	0.49 U	---
trans-1,2-Dichloroethene	ug/l	---	3.9	2.9	2.7	2.4	---	---	0.27 U	0.27 U	---
Trichloroethene	ug/l	---	26	24	24	24	---	---	1.5	1.3	---
Trichlorofluoromethane	ug/l	---	0.34 U	0.34 U	0.34 U	0.34 U	---	---	0.34 U	0.34 U	---
Trichlorotrifluoroethane (Freon 113)	ug/l	---	5	1.2 U	1.2 U	1.2 UJ	---	---	1.2 U	1.2 U	---
Vinyl chloride	ug/l	---	2.3	2.5	2	2.6	---	---	0.19 U	0.19 U	---
Naturally Occurring Constituents											
Ammonia-N	mg/l	---	0.087 U	0.11 U	0.11 J	0.11 J	---	---	0.098 J	---	---
Fluoride	mg/l	---	0.32 J	0.33 J	0.41 J	0.34 J	---	---	0.26 J	0.31 J	---
Formaldehyde	ug/l	---	20 U	20 U	20 U	20 U	---	---	20 U	20 U	---
Nitrate-N	mg/l	---	0.072 U	0.072 U	0.072 U	0.072 U	---	---	0.072 U	0.072 U	---
Laboratory		DMA	DMA	DMA	DMA	DMA	Geimic	DMA	DMA	DMA	DMA

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier		WS-06	WS-06	WS-06	WS-06	WS-09	WS-09	WS-12	WS-13
FLUTE Sample Port		---	---	---	---	---	---	---	---
Sample Date		02/03/03	05/07/03	08/19/03	11/19/03	02/03/03	05/07/03	08/13/03	08/20/03
Sample Type		Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Qualifier	Units	---	---	---	---	---	---	---	---
Organic Constituents and Perchlorate									
1,1,1-Trichloroethane	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	12 U	12 U	0.3 U	0.3 U
1,1,2-Trichloroethane	ug/l	0.3 U	0.3 U	0.3 U	0.3 U	12 U	12 U	0.3 U	0.3 U
1,1-Dichloroethane	ug/l	0.27 U	0.27 U	0.27 U	0.27 U	11 U	11 U	0.27 U	0.27 U
1,1-Dichloroethene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	13 U	13 U	0.32 U	0.32 U
1,2-Dichloroethane	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	11 U	11 U	0.28 U	0.28 U
1,3-Dinitrobenzene	ug/l	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U	8.4 U
1,4-Dioxane	ug/l	0.768 J	0.898 J	0.698 U	0.79 U	1.93 J	3.71	0.336 U	0.297 U
2-Butanone	ug/l	3.8 U	3.8 U	3.8 U	3.8 U	150 U	150 U	3.8 U	3.8 U
Acetone	ug/l	4.5 U	4.5 U	4.5 U	4.5 U	180 U	180 U	4.5 U	4.5 U
Benzene	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	11 U	11 U	0.28 U	0.28 U
Carbon tetrachloride	ug/l	0.28 U	0.28 U	0.28 U	0.28 U	11 U	11 U	0.28 U	0.28 U
Chloroform	ug/l	0.33 U	0.33 U	0.33 U	0.33 U	13 U	13 U	0.33 U	0.33 U
cis-1,2-Dichloroethene	ug/l	38	36	47	52	430	410	14	0.32 U
Ethylbenzene	ug/l	0.25 U	0.25 U	0.25 U	0.25 U	10 U	10 U	0.25 U	0.25 U
m,p-Xylenes	ug/l	0.38 U	0.38 U	0.52 U	0.52 U	15 U	15 U	0.52 U	0.52 U
Methylene chloride	ug/l	0.33 U	0.33 U	0.48 U	0.88 J,L	13 U	13 U	0.62 U	0.48 U
n-Nitrosodimethylamine	ug/l	0.0005 U	0.0007 U	0.0014 U	3 U	0.0005 U	0.003	0.001 J,S	0.0012 U
Nitrobenzene	ug/l	9.6 U	9.6 U	2.7 U	2.7 U	9.6 U	9.6 U	2.7 U	2.7 U
o-Xylene	ug/l	0.24 U	0.24 U	0.24 U	0.24 U	9.6 U	9.6 U	0.24 U	0.24 U
Perchlorate	ug/l	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
Tetrachloroethene	ug/l	0.32 U	0.32 U	0.32 U	0.32 U	13 U	13 U	0.32 U	0.32 U
Toluene	ug/l	0.49 U	0.49 U	0.36 U	0.36 U	20 U	20 U	0.36 U	0.36 U
trans-1,2-Dichloroethene	ug/l	6	6.1	8.1	7.6	11 U	11 U	1.1	0.27 U
Trichloroethene	ug/l	7	2.8	4.6	4.4	7600	7300	16	0.26 U
Trichlorofluoromethane	ug/l	0.34 U	0.34 U	0.34 U	0.34 U	14 U	14 U	0.34 U	0.34 U
Trichlorotrifluoroethane (Freon 113)	ug/l	1.2 U	1.2 U	1.2 U	1.2 U	48 U	48 U	1.2 U	1.2 U
Vinyl chloride	ug/l	1.8	1.5	2.1	2.6	7.6 U	7.6 U	0.26 U	0.26 U
Naturally Occurring Constituents									
Ammonia-N	mg/l	0.1 J	0.11 U	0.11 U	0.11 U	0.087 U	0.11 U	0.11 U	0.11 U
Fluoride	mg/l	0.3 J	0.31 J	0.42 J	0.3 J	0.28 J	0.35 J	0.45 J	0.48 J
Formaldehyde	ug/l	20 U	22 J	20 U	---	20 U	21 J,L	20 U	20 U
Nitrate-N	mg/l	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Laboratory		DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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TABLE XII
FOOTNOTES AND EXPLANATIONS

Ceimic	=	Ceimic Corporation of Narragansett, Rhode Island.
DMA	=	Del Mar Analytical of Irvine, California.
Pacific	=	Pacific Analytical of Carlsbad, California.
Weck	=	Weck Laboratories of City of Industry, California.
(---)	=	Analysis not performed.
Comp	=	Composite sample. First and third quarter RD-10 samples were composited at the laboratory from FLUTe ports 3, 6, and 9.
Primary	=	Primary sample.
Dup	=	Sample duplicate.
Split	=	Split sample.
Split Dup	=	Duplicate sample analyzed by the split lab.
mg/l	=	Milligrams per liter.
ug/l	=	Micrograms per liter.
F	=	Sampled through multi-level FLUTe ports. Footnoted results are not representative of historic groundwater samples, and may have been introduced in the FLUTe samples by compressed nitrogen gas, electrical tape and/or FLUTe components.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
L	=	Laboratory contaminant.
R	=	The analyte result was rejected; presence or absence of the analyte cannot be verified.
S	=	Suspect result.
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range (see Appendix D for details).

Note:

Low-level 1,4-dioxane analyses were performed on primary samples by Ceimic Corporation using modified EPA method 8260 SIM.

Low-level N-nitrosodimethylamine (NDMA) analyses were performed on primary samples by Weck Laboratories using modified EPA method 1625. NDMA results for fourth quarter samples from wells RD-02, RD-04, RD-49A, RD-49B, RD-49C, and WS-06 were analyzed by Del Mar Analytical using EPA method 8270.

TABLE XIII

SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier				RD-51B	RD-51C	RD-52B	RD-52C	RD-59A	RD-59B	RD-59C	RD-68A	RD-68B
Sample Date				11/06/03	11/07/03	11/18/03	11/19/03	11/14/03	12/04/03	12/04/03	12/04/03	12/04/03
Sample Type				Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	Method	MCL									
Calcium	mg/l	6010B	NA	120	89	110	95	90	56	37	11	63
Magnesium	mg/l	6010B	NA	41	30	30	23	27	16	12	21	18
Potassium	mg/l	6010B	NA	5.3	3.5	4.3	3.5	4	3.1	2.5	4.2	3.6
Sodium	mg/l	6010B	NA	64	84	67	53	97	94	130	76	89
Bicarbonate as CaCo3	mg/l	SM2320B	NA	380	300	340	300	290	260	280	170	300
Carbonate as CaCo3	mg/l	SM2320B	NA	2 U	2 U	2 U	2 U	2 U	2 U	2 U	4	2 U
Chloride	mg/l	300.0	250 SMCL	47	39	37	31	48	33	30	36	28
Fluoride	mg/l	300.0	2.0	---	---	---	---	---	---	---	---	---
Nitrate-N	mg/l	300.0	10 EPA	0.072 U	0.072 U	0.072 U	0.072 U	---	0.072 U	0.072 U	0.072 U	0.072 U
Sulfate	mg/l	300.0	250 SMCL	170	150	170	140	190	100	100	50	92
Total Dissolved Solids	mg/l	160.1	500 SMCL	730	640	670	570	680	480	550	410	490
Total Iron	mg/l	6010B	NA	0.34	0.18	2.5	0.37	0.083 U	0.069	0.021 J	0.32	1.1
Dissolved Iron	mg/l	6010B-Diss	NA	0.28	0.18	0.26	0.23	0.029 J	0.065	0.011 J	0.058	1.1
pH	pH units	150.1	6.5-8.5 SMCL	7.01	7.72	7.27	7.43	---	7.44	7.71	8.72	7.43
Specific Conductance	umhos/cm	120.1	900	1200	1000	1100	910	1100	790	810	550	800
Delta Deuterium	per mil	MS	NA	---	---	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	MS	NA	---	---	---	---	---	---	---	---	---
Laboratory				DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier				WS-04A	WS-09B	OS-02	OS-03	OS-04	OS-05	OS-08	OS-09	OS-09
Sample Date				12/03/03	11/06/03	12/09/03	12/09/03	12/09/03	12/09/03	12/09/03	07/02/03	07/10/03
Sample Type				Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	Method	MCL									
Calcium	mg/l	6010B	NA	110	120	9.1	53	100	90	79	3.1	3.1
Magnesium	mg/l	6010B	NA	26	44	3.2	16	26	25	29	1.9	1.9
Potassium	mg/l	6010B	NA	3.8	5.6	1.5	3.1	4.4	3.8	3.5	2	0.95
Sodium	mg/l	6010B	NA	42	61	170	100	84	94	97	200	190
Bicarbonate as CaCo3	mg/l	SM2320B	NA	270	370	260	250	320	300	300	260	260
Carbonate as CaCo3	mg/l	SM2320B	NA	2 U	2 U	8	2 U	2 U	2 U	2 U	6.4	12
Chloride	mg/l	300.0	250 SMCL	30	48	26	35	41	43	36	26	28
Fluoride	mg/l	300.0	2.0	---	---	---	---	---	---	---	---	---
Nitrate-N	mg/l	300.0	10 EPA	0.072 U	0.072 U	0.16	0.072 U	0.072 U	0.072 U	0.078 J	0.072 U	0.072 U
Sulfate	mg/l	300.0	250 SMCL	210	150	80	100	160	160	160	130	120
Total Dissolved Solids	mg/l	160.1	500 SMCL	610	720	530	510	690	630	620	570	580
Total Iron	mg/l	6010B	NA	8.2	0.055	0.051	0.32	36	0.02 J	0.087	---	---
Dissolved Iron	mg/l	6010B-Diss	NA	0.93	0.64 W	0.0088 U	0.3	2.1	0.011 J	0.0088 J	---	---
pH	pH units	150.1	6.5-8.5 SMCL	7.3	7.02	8.27	7.69	7.36	7.32	8.03	8.42	8.6
Specific Conductance	umhos/cm	120.1	900	900	1200	800	800	1000	980	960	870	890
Delta Deuterium	per mil	MS	NA	---	---	---	---	---	---	---	-52.2	---
Delta Oxygen-18	per mil	MS	NA	---	---	---	---	---	---	---	-7.32	---
Laboratory				DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA/GGH	DMA

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SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier				OS-09	OS-09	OS-09	OS-09	OS-09	OS-09	OS-09	OS-09	OS-09
Sample Date				07/17/03	07/24/03	07/31/03	08/07/03	08/12/03	08/21/03	08/28/03	09/04/03	09/11/03
Sample Type				Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	Method	MCL									
Calcium	mg/l	6010B	NA	3.1	3	2.9	3	3.3	3.1	3.1	3.2	3.1
Magnesium	mg/l	6010B	NA	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9
Potassium	mg/l	6010B	NA	1.2	1.5	1.2	1.2	1.2	1.3	1.1	1	1.2 U
Sodium	mg/l	6010B	NA	190	190	190	190	190	190	200	200	190
Bicarbonate as CaCo3	mg/l	SM2320B	NA	250	220	270	100	270	250	270	250	250
Carbonate as CaCo3	mg/l	SM2320B	NA	24	36	2 U	160	4	8	9.6	8	24
Chloride	mg/l	300.0	250 SMCL	26	28	26	26	26	25	27	28	27
Fluoride	mg/l	300.0	2.0	---	---	---	---	---	---	---	---	---
Nitrate-N	mg/l	300.0	10 EPA	0.083 J	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U
Sulfate	mg/l	300.0	250 SMCL	130	140	130	140	130	120	130	130	120
Total Dissolved Solids	mg/l	160.1	500 SMCL	580	640	570	580	580	550	760	610	600
Total Iron	mg/l	6010B	NA	---	---	---	---	---	0.012 U	0.0088 U	0.032 J	0.012 J
Dissolved Iron	mg/l	6010B-Diss	NA	---	---	---	---	---	0.0088 U	0.0088 U	0.0088 U	0.0088 U
pH	pH units	150.1	6.5-8.5 SMCL	8.64	8.56	8.29	8.26	8.39	8.42	8.49	8.42	8.58
Specific Conductance	umhos/cm	120.1	900	890	880	880	900	890	880	870	870	870
Delta Deuterium	per mil	MS	NA	-52.5	---	---	---	---	---	-51.1	---	---
Delta Oxygen-18	per mil	MS	NA	-7.33	---	---	---	---	---	-7.17	---	---
Laboratory				DMA/GGH	DMA	DMA	DMA	DMA	DMA	DMA/GGH	DMA	DMA

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SUMMARY OF ANALYSES FOR INORGANIC CONSTITUENTS, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier				OS-09	OS-09	OS-09	OS-09	OS-09	OS-09	OS-09	OS-09	OS-09
Sample Date				09/18/03	09/25/03	10/02/03	11/06/03	11/13/03	11/20/03	11/24/03	12/04/03	12/11/03
Sample Type				Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary	Primary
Compound	Units	Method	MCL									
Calcium	mg/l	6010B	NA	3.1	3	3	3	2.9	2.9	2.9	3.2	3.1
Magnesium	mg/l	6010B	NA	1.9	1.8	1.9	1.8	1.8	1.8	1.8	1.9	1.9
Potassium	mg/l	6010B	NA	1.3	1.1	1.4	1.1	1.2	1.1	2.4	1.3	1.3
Sodium	mg/l	6010B	NA	190	190	190	200	190	190	200	200	210
Bicarbonate as CaCo3	mg/l	SM2320B	NA	280	260	260	280	300	250	270	280	300
Carbonate as CaCo3	mg/l	SM2320B	NA	2 U	2 U	16	4	16	32	2 U	4	4
Chloride	mg/l	300.0	250 SMCL	28	26	26	24	28	28	29	30	26
Fluoride	mg/l	300.0	2.0	---	---	---	---	---	---	---	---	---
Nitrate-N	mg/l	300.0	10 EPA	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.072 U	0.075 J	0.072 U	0.072 U
Sulfate	mg/l	300.0	250 SMCL	120	110	120	120	120	110	110	130	110
Total Dissolved Solids	mg/l	160.1	500 SMCL	590	600	690	580	650	650	600	570	600
Total Iron	mg/l	6010B	NA	0.017 J	0.010 J	0.026 J	0.033 J	0.054	0.014 J	0.02 J	0.03 J	0.83
Dissolved Iron	mg/l	6010B-Diss	NA	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.0088 U	0.016 J	0.0088 U	0.0088 U
pH	pH units	150.1	6.5-8.5 SMCL	8.68	8.56	8.66	8.41	8.47	8.59	8.67	8.67	8.48
Specific Conductance	umhos/cm	120.1	900	850	870	860	890	880	880	880	880	880
Delta Deuterium	per mil	MS	NA	---	-53.8	---	-51.0	---	---	---	-52.1	---
Delta Oxygen-18	per mil	MS	NA	---	-7.52	---	-7.40	---	---	---	-7.32	---
Laboratory				DMA	DMA/GGH	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier				OS-09	OS-09	OS-09	OS-10	OS-21	OS-26	OS-28	OS-28
Sample Date				12/18/03	12/23/03	12/30/03	12/09/03	12/02/03	12/02/03	08/22/03	08/22/03
Sample Type				Primary	Primary	Primary	Primary	Primary	Primary	Primary	Dup
Compound	Units	Method	MCL								
Calcium	mg/l	6010B	NA	3.2	3.2	3.1	5.1	120	110	110	110
Magnesium	mg/l	6010B	NA	1.9	2.0	1.9	1.5	45	56	58	58
Potassium	mg/l	6010B	NA	1.1	1.2	1.2	1.4	4.4	4.5	4.6	4.9
Sodium	mg/l	6010B	NA	200	200	210	160	73	62	66	65
Bicarbonate as CaCo3	mg/l	SM2320B	NA	260	270	260	270	310	330	340	330
Carbonate as CaCo3	mg/l	SM2320B	NA	8	8.0	4.0	8	2 U	2 U	2 U	2 U
Chloride	mg/l	300.0	250 SMCL	27	27	25	21	28	54	38	38
Fluoride	mg/l	300.0	2.0	---	---	---	---	---	---	0.53	0.5
Nitrate-N	mg/l	300.0	10 EPA	0.072 U	0.072 U	0.072 U	0.076 J	0.072 U	0.072 U	0.072 U	0.072 U
Sulfate	mg/l	300.0	250 SMCL	110	120	120	62	310	230	250	250
Total Dissolved Solids	mg/l	160.1	500 SMCL	600	590	600	480	810	790	770	790
Total Iron	mg/l	6010B	NA	0.036 J	0.012 U	0.018 J	0.051	0.53	0.17	---	---
Dissolved Iron	mg/l	6010B-Diss	NA	0.0088 U	0.0088 U	0.0088 U	0.041	0.095	0.12	---	---
pH	pH units	150.1	6.5-8.5 SMCL	8.7	8.60	8.54	8.49	7.26	7.12	7.29	7.26
Specific Conductance	umhos/cm	120.1	900	870	870	900	700	1200	1200	1200	1200
Delta Deuterium	per mil	MS	NA	---	---	---	---	---	---	---	---
Delta Oxygen-18	per mil	MS	NA	---	---	---	---	---	---	---	---
Laboratory				DMA	DMA	DMA	DMA	DMA	DMA	DMA	DMA

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FOOTNOTES AND EXPLANATIONS

EPA	=	EPA Primary Drinking Water MCL.
DMA	=	Del Mar Analytical of Irvine, California.
GGH	=	G.G. Hatch Laboratories of Ottawa, Ontario. Oxygen-18 and deuterium isotope analyses.
MCL	=	Maximum Contaminant Level, California primary drinking water standard (California Department of Health Services, 2003. http://www.dhs.ca.gov/ps/ddwem/publications/regulations/MCLrevisions6-12-03.pdf).
NA	=	Not applicable; no MCL promulgated.
SMCL	=	California DHS Secondary Drinking Water MCL.
(---)	=	Analysis not performed.
Primary	=	Primary sample.
Dup	=	Sample duplicate.
mg/l	=	Milligrams per liter.
per mil	=	Parts per thousand.
umhos/cm	=	Micromhos per centimeter.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
W	=	Result not verified.

Note: Well OS-09 has been also referred to as Brandeis-Bardin Institute "Bathtub Well No. 1".

TABLE XIV

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
Delta ASU	HAR-07	01/07/03	1728.38	76.73	1651.65	0*		(1)
		02/04/03	1728.38	75.28	1653.10	0*		(1)
		03/04/03	1728.38	79.13	1649.25	0*	0*	(1)
		04/18/03	1728.38	76.94	1651.44	0*		(1)
		05/06/03	1728.38	75.32	1653.06	0*		(1)
		06/10/03	1728.38	52.84	1675.54	0*	0*	(1)
		07/18/03	1728.38	54.78	1673.60	0*		(1)
		08/06/03	1728.38	56.86	1671.52	0*		(1)
		09/03/03	1728.38	40.14	1688.24	0*	0*	(1)
		10/06/03	1728.38	38.14	1690.24	0*		(1)
		11/05/03	1728.38	72.77	1655.61	0*		(1)
		12/04/03	1728.38	36.45	1691.93	0*	0*	(1)
	WS-09A	01/07/03	1647.61	54.23	1593.38	15.02		(1)
		02/04/03	1647.61	35.84	1611.77	33.75		(1)
		03/04/03	1647.61	21.22	1626.39	6.48	18.34	(1)
		04/08/03	1647.61	22.66	1624.95	6.80		(1)
		05/06/03	1647.61	38.43	1609.18	11.56		(1)
		06/04/03	1647.61	52.67	1594.94	0.43	6.2	(1)
		07/18/03	1647.61	41.28	1606.33	7.56		(1)
		08/05/03	1647.61	32.31	1615.30	7.10		(1)
		09/03/03	1647.61	54.41	1593.20	10.52	8.39	(1)
		10/06/03	1647.61	62.76	1584.85	0.92		(1)
		11/04/03	1647.61	37.24	1610.37	5.96		(1)
		12/04/03	1647.61	63.14	1584.47	7.27	4.72	(1)
Alfa ASU	WS-06	01/04/03	1932.72	NA	—	0*		(1)
		01/30/03	1932.72	400.15	1532.57	0*		(1)
		03/04/03	1932.72	NA	—	0*	0*	(1)
		04/08/03	1932.72	NA	—	0*		(1)
		04/29/03	1932.72	395.35	1537.37	0*		(1)
		06/10/03	1932.72	421.61	1511.11	0*	0*	(1)
		07/18/03	1932.72	449.10	1483.62	0*		(1)
		08/06/03	1932.72	390.75	1541.97	0*		(1)
		09/03/03	1932.72	446.64	1486.08	0*	0*	(1)
		10/10/03	1932.72	445.25	1487.47	0*		(1)
		11/05/03	1932.72	387.50	1545.22	0*		(1)
		12/03/03	1932.72	443.79	1488.93	0*	0*	(1)
Bravo ASU	ES-21	01/03/03	1769.62	31.13	1738.49	0*		(2)
		02/03/03	1769.62	31.29	1738.33	0*		(2)
		03/03/03	1769.62	30.86	1738.76	0*	0*	(2)
		04/03/03	1769.62	29.56	1740.06	0*		(2)
		05/03/03	1769.62	28.89	1740.73	0*		(2)
		06/03/03	1769.62	28.58	1741.04	0*	0*	(2)
		07/03/03	1769.62	28.61	1741.01	0*		(2)
		08/03/03	1769.62	29.27	1740.35	0*		(2)
		09/03/03	1769.62	29.97	1739.65	0*	0*	(2)
		10/03/03	1769.62	30.56	1739.06	0*		(2)

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TABLE XIV

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
Bravo ASU	ES-21	11/03/03	1769.62	31.05	1738.57	0*		(2)
		12/03/03	1769.62	31.42	1738.20	0*	0*	(2)
	ES-22	01/07/03	1770.93	27.48	1743.45	0*		(1)
		02/04/03	1770.93	27.90	1743.03	0*		(1)
		03/04/03	1770.93	25.43	1745.50	0*	0*	(1)
		04/08/03	1770.93	25.61	1745.32	0*		(1)
		05/06/03	1770.93	25.34	1745.59	0*		(1)
		06/04/03	1770.93	26.01	1744.92	0*	0*	(1)
		07/02/03	1770.93	25.98	1744.95	0*		(1)
		08/06/03	1770.93	30.34	1740.59	0*		(1)
		09/03/03	1770.93	25.01	1745.92	0*	0*	(1)
		10/06/03	1770.93	24.96	1745.97	0*		(1)
		11/03/03	1770.93	12.22	1758.71	0*		(1)
		12/03/03	1770.93	24.79	1746.14	0*	0*	(1)
	RD-04	01/07/03	1883.85	UTM	---	0*		(1)
		02/04/03	1883.85	UTM	---	0*		(1)
		03/04/03	1883.85	UTM	---	0*	0*	(1)
		04/08/03	1883.85	UTM	---	0*		(1)
		05/06/03	1883.85	UTM	---	0*		(1)
		06/04/03	1883.85	396.24	1487.61	0*	0*	(1)
		07/18/03	1883.85	389.42	1494.43	0*		(1)
		08/06/03	1883.85	340.76	1543.09	0*		(1)
		09/03/03	1883.85	385.64	1498.21	0*	0*	(1)
		10/06/03	1883.85	382.44	1501.41	0*		(1)
		11/04/03	1883.85	337.15	1546.70	0*		(1)
		12/03/03	1883.85	381.76	1502.09	0*	0*	(1)
	RD-09	01/07/03	1768.20	33.12	1735.08	0*		(1)
		02/04/03	1768.20	32.95	1735.25	0*		(1)
		03/04/03	1768.20	32.24	1735.96	0*	0*	(1)
		04/08/03	1768.20	33.61	1734.59	0*		(1)
		05/06/03	1768.20	33.05	1735.15	0*		(1)
		06/10/03	1768.20	36.61	1731.59	0*	0*	(1)
		07/02/03	1768.20	35.22	1732.98	0*		(1)
		08/06/03	1768.20	29.85	1738.35	0*		(1)
		09/03/03	1768.20	36.81	1731.39	0*	0*	(1)
		10/10/03	1768.20	35.96	1732.24	0*		(1)
		11/04/03	1768.20	35.41	1732.79	0*		(1)
		12/03/03	1768.20	35.22	1732.98	0*	0*	(1)
	WS-09	01/07/03	1883.99	349.65	1534.34	0*		(1)
		02/04/03	1883.99	348.24	1535.75	0*		(1)
		03/04/03	1883.99	358.61	1525.38	0*	0*	(1)
		04/08/03	1883.99	358.42	1525.57	0*		(1)
		05/06/03	1883.99	357.98	1526.01	0*		(1)
		06/04/03	1883.99	356.41	1527.58	0*	0*	(1)
		07/18/03	1883.99	357.21	1526.78	0*		(1)
		08/13/03	1883.99	358.21	1525.78	0*		(1)

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SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
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Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
Bravo ASU	WS-09	09/03/03	1883.99	359.18	1524.81	0*	0*	(1)
		10/06/03	1883.99	357.43	1526.56	0*		(1)
		11/05/03	1883.99	331.98	1552.01	0*		
		12/04/03	1883.99	356.86	1527.13	0*	0*	(1)
Area I Road ASU	ES-01	01/03/03	1782.20	DRY	---	0*		(2)
		02/03/03	1782.20	DRY	---	0*		(2)
		03/03/03	1782.20	21.82	1760.38	0*	0*	(2)
		04/03/03	1782.20	21.17	1761.03	0*		(2)
		05/03/03	1782.20	19.71	1762.49	0*		(2)
		06/03/03	1782.20	19.21	1762.99	0*	0*	(2)
		07/03/03	1782.20	19.32	1762.88	0*		(2)
		08/03/03	1782.20	19.98	1762.22	0*		(2)
		09/03/03	1782.20	20.46	1761.74	0*	0*	(2)
		10/03/03	1782.20	20.49	1761.71	0*		(2)
		11/03/03	1782.20	18.50	1763.70	0*		(2)
		12/03/03	1782.20	17.53	1764.67	0*	0*	(2)
	ES-03	01/07/03	1783.39	DRY	---	0*		(1)
		02/04/03	1783.39	DRY	---	0*		(1)
		03/04/03	1783.39	DRY	---	0*	0*	(1)
		04/08/03	1783.39	DRY	---	0*		(1)
		05/06/03	1783.39	DRY	---	0*		(1)
		06/04/03	1783.39	DRY	---	0*	0*	(1)
		07/02/03	1783.39	DRY	---	0*		(1)
		08/06/03	1783.39	21.43	1761.96	0*		
		09/03/03	1783.39	DRY	---	0*	0*	(1)
		10/10/03	1783.39	DRY	---	0*		(1)
		11/05/03	1783.39	19.71	1763.68	0*		
		12/03/03	1783.39	DRY	---	0*	0*	(1)
	ES-04	01/07/03	1817.24	DRY	---	0*		(1)
		02/04/03	1817.24	DRY	---	0*		(1)
		03/04/03	1817.24	DRY	---	0*	0*	(1)
		04/08/03	1817.24	DRY	---	0*		(1)
		04/29/03	1817.24	9.62	1807.62	0*		
		06/04/03	1817.24	DRY	---	0*	0*	(1)
		07/02/03	1817.24	DRY	---	0*		(1)
		08/06/03	1817.24	11.57	1805.67	0*		
		09/03/03	1817.24	DRY	---	0*	0*	(1)
		10/10/03	1817.24	DRY	---	0*		(1)
		11/04/03	1817.24	DRY	---	0*		
		12/03/03	1817.24	DRY	---	0*	0*	(1)
	ES-05	01/07/03	1818.13	DRY	---	0*		(1)
		02/04/03	1818.13	DRY	---	0*		(1)
		03/04/03	1818.13	DRY	---	0*	0*	(1)
		04/08/03	1818.13	DRY	---	0*		(1)
		04/29/03	1818.13	8.20	1809.93	0*		
		06/04/03	1818.13	DRY	---	0*	0*	(1)

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SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
Area I Road ASU	ES-05	07/02/03	1818.13	DRY	---	0*		(1)
		08/06/03	1818.13	11.26	1806.87	0*		
		09/03/03	1818.13	DRY	---	0*	0*	(1)
		10/10/03	1818.13	DRY	---	0*		(1)
		11/04/03	1818.13	17.94	1800.19	0*		
		12/03/03	1818.13	DRY	---	0*	0*	(1)
	ES-06	01/03/03	1825.41	DRY	---	0*		(2)
		02/03/03	1825.41	DRY	---	0*		(2)
		03/03/03	1825.41	16.87	1808.54	0*	0*	(2)
		04/03/03	1825.41	11.05	1814.36	0*		(2)
		05/03/03	1825.41	12.09	1813.32	0*		(2)
		06/03/03	1825.41	11.41	1814.00	0*	0*	(2)
		07/03/03	1825.41	12.84	1812.57	0*		(2)
		08/03/03	1825.41	14.67	1810.74	0*		(2)
		09/03/03	1825.41	17.14	1808.27	0*	0*	(2)
		10/03/03	1825.41	17.66	1807.75	0*		(2)
		11/03/03	1825.41	18.28	1807.13	0*		(2)
		12/03/03	1825.41	22.19	1803.22	0*	0*	(2)
	ES-07	01/07/03	1826.53	DRY	---	0*		(1)
		02/04/03	1826.53	DRY	---	0*		(1)
		03/04/03	1826.53	DRY	---	0*	0*	(1)
		04/08/03	1826.53	DRY	---	0*		(1)
		05/06/03	1826.53	DRY	---	0*		(1)
		06/04/03	1826.53	DRY	---	0*	0*	(1)
		07/02/03	1826.53	DRY	---	0*		(1)
		08/06/03	1826.53	DRY	---	0*		
		09/03/03	1826.53	DRY	---	0*	0*	(1)
		10/10/03	1826.53	DRY	---	0*		(1)
		11/04/03	1826.53	DRY	---	0*		
		12/03/03	1826.53	DRY	---	0*	0*	(1)
	RD-01	01/07/03	1935.89	203.67	1732.22	0*		(1)
		02/04/03	1935.89	203.88	1732.01	0*		(1)
		03/04/03	1935.89	201.16	1734.73	0*	0*	(1)
		04/08/03	1935.89	200.93	1734.96	0*		(1)
		05/06/03	1935.89	201.33	1734.56	0*		(1)
		06/10/03	1935.89	200.74	1735.15	0*	0*	(1)
		07/02/03	1935.89	201.01	1734.88	0*		(1)
		08/05/03	1935.89	206.20	1729.69	0*		
		09/03/03	1935.89	204.84	1731.05	0*	0*	(1)
		10/10/03	1935.89	204.80	1731.09	0*		(1)
		11/04/03	1935.89	204.47	1731.42	0*		(1)
		12/03/03	1935.89	204.61	1731.28	0*	0*	(1)
	RD-02	01/07/03	1873.92	174.88	1699.04	0*		(1)
		02/04/03	1873.92	172.32	1701.60	0*		(1)
		03/04/03	1873.92	171.67	1702.25	0*	0*	(1)
		04/08/03	1873.92	171.43	1702.49	0*		(1)

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TABLE XIV

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
Area I Road ASU	RD-02	05/06/03	1873.92	170.79	1703.13	0*		(1)
		06/10/03	1873.92	172.36	1701.56	0*	0*	(1)
		07/02/03	1873.92	171.69	1702.23	0*		(1)
		08/06/03	1873.92	171.34	1702.58	0*		
		09/03/03	1873.92	171.15	1702.77	0*	0*	(1)
		10/10/03	1873.92	172.11	1701.81	0*		(1)
		11/06/03	1873.92	171.15	1702.77	0*		
		12/03/03	1873.92	171.52	1702.40	0*	0*	(1)
WS-05 UV/H2O2	ES-11	01/07/03	1835.07	DRY	---	0*		(1)
		02/04/03	1835.07	DRY	---	0*		(1)
		03/04/03	1835.07	DRY	---	0*	0*	(1)
		04/08/03	1835.07	DRY	---	0*		(1)
		04/29/03	1835.07	19.72	1815.35	0*		
		06/04/03	1835.07	DRY	---	0*	0*	(1)
		07/02/03	1835.07	DRY	---	0*		(1)
		08/07/03	1835.07	DRY	---	0*		
		09/03/03	1835.07	DRY	---	0*	0*	(1)
		10/10/03	1835.07	DRY	---	0*		(1)
		11/04/03	1835.07	DRY	---	0*		
		12/03/03	1835.07	DRY	---	0*	0*	(1)
	HAR-04	01/07/03	1873.40	20.81	1852.59	0*		(1)
		02/04/03	1873.40	20.37	1853.03	0*		(1)
		03/04/03	1873.40	20.26	1853.14	0*	0*	(1)
		04/08/03	1873.40	21.30	1852.10	0*		(1)
		04/29/03	1873.40	16.72	1856.68	0*		
		06/04/03	1873.40	UTM	---	0*	0*	(1)
		07/02/03	1873.40	NA	---	0*		(1)
		08/05/03	1873.40	19.39	1854.01	0*		
		09/03/03	1873.40	18.77	1854.63	0*	0*	(1)
		10/10/03	1873.40	19.10	1854.30	0*		(1)
		11/04/03	1873.40	21.47	1851.93	0*		
		12/03/03	1873.40	19.02	1854.38	0*	0*	(1)
	HAR-16	01/07/03	1872.31	NA**	---	0*		
		02/04/03	1872.31	NA**	---	0*		
		03/04/03	1872.31	NA**	---	0*	0*	
		04/08/03	1872.31	NA**	---	0*		
		05/06/03	1872.31	NA**	---	0*		
		06/04/03	1872.31	NA**	---	0*	0*	
		07/02/03	1872.31	NA**	---	0*		
		08/05/03	1872.31	NA**	---	0*		
		09/03/03	1872.31	NA**	---	0*	0*	
		10/06/03	1872.31	NA**	---	0*		
		11/03/03	1872.31	NA**	---	0*		
		12/03/03	1872.31	NA**	---	0*	0*	

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
WS-05 UV/H2O2	WS-05	01/07/03	1830.20	294.44	1535.76	0*		(1)(C)
		02/04/03	1830.20	292.17	1538.03	0*		(1)(C)
		03/04/03	1830.20	287.16	1543.04	0*	0*	(1)(C)
		04/08/03	1830.20	287.40	1542.80	0*		(1)(C)
		05/06/03	1830.20	286.22	1543.98	0*		(1)(C)
		06/04/03	1830.20	285.96	1544.24	0*	0*	(1)(C)
		07/02/03	1830.20	284.86	1545.34	0*		(1)(C)
		08/06/03	1830.20	284.73	1545.47	0*		(C)
		09/03/03	1830.20	284.00	1546.20	0*	0*	(1)(C)
		10/06/03	1830.20	284.34	1545.86	0*		(1)(C)
		11/04/03	1830.20	284.28	1545.92	0*		(1)(C)
		12/03/03	1830.20	283.97	1546.23	0*	0*	(1)(C)
STL-IV ASU	ECL FD	01/07/03	---	DRY	---	0*		(1)
		02/04/03	---	DRY	---	0*		(1)
		03/04/03	---	DRY	---	0*	0*	(1)
		04/08/03	---	DRY	---	0*		(1)
		05/06/03	---	DRY	---	0*		(1)
		06/04/03	---	DRY	---	0*	0*	(1)
		07/02/03	---	DRY	---	0*		(1)
		08/13/03	---	DRY	---	0*		(1)
		09/03/03	---	DRY	---	0*	0*	(1)
		10/06/03	---	DRY	---	0*		(1)
		11/03/03	---	DRY	---	0*		(1)
		12/03/03	---	DRY	---	0*	0*	(1)
	ECL Sump	01/07/03	---	DRY	---	0*		(1)
		02/04/03	---	DRY	---	0*		(1)
		03/04/03	---	DRY	---	0*	0*	(1)
		04/08/03	---	DRY	---	0*		(1)
		05/06/03	---	DRY	---	0*		(1)
		06/04/03	---	DRY	---	0*	0*	(1)
		07/02/03	---	DRY	---	0*		(1)
		08/13/03	---	DRY	---	0*		(1)
		09/03/03	---	DRY	---	0*	0*	(1)
		10/06/03	---	DRY	---	0*		(1)
		11/03/03	---	DRY	---	0*		(1)
		12/03/03	---	DRY	---	0*	0*	(1)
ES-14	ES-14	01/07/03	1728.69	DRY	---	0*		(1)
		02/04/03	1728.69	DRY	---	0*		(1)
		03/04/03	1728.69	DRY	---	0*	0*	(1)
		04/08/03	1728.69	DRY	---	0*		(1)
		05/06/03	1728.69	DRY	---	0*		(1)
		06/04/03	1728.69	DRY	---	0*	0*	(1)
		07/02/03	1728.69	DRY	---	0*		(1)
		08/06/03	1728.69	DRY	---	0*		(1)
		09/03/03	1728.69	DRY	---	0*	0*	(1)
		10/06/03	1728.69	DRY	---	0*		(1)

See last page of Table XIV for footnotes and explanations.

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TABLE XIV

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
STL-IV ASU	ES-14	11/04/03	1728.69	DRY	---	0*		(1)
		12/03/03	1728.69	DRY	---	0*	0*	(1)
	ES-17	01/07/03	1739.31	25.68	1713.63	0*		(1)
		02/04/03	1739.31	24.87	1714.44	0*		(1)
		03/04/03	1739.31	23.87	1723.61	0*	0*	(1)
		04/08/03	1739.31	24.14	1715.17	0*		(1)
		05/06/03	1739.31	24.05	1715.26	0*		(1)
		06/04/03	1739.31	24.32	1723.61	0*	0*	(1)
		07/02/03	1739.31	24.14	1715.17	0*		(1)
		08/04/03	1739.31	21.04	1718.27	0*		(1)
		09/03/03	1739.31	23.86	1715.45	0*	0*	(1)
		10/06/03	1739.31	23.98	1715.33	0*		(1)
		11/03/03	1739.31	28.15	1711.16	0*		(1)
		12/03/03	1739.31	23.69	1715.62	0*	0*	(1)
	ES-23	01/07/03	1760.73	12.89	1747.84	0*		(1)
		02/04/03	1760.73	12.64	1748.09	0*		(1)
		03/04/03	1760.73	12.11	1748.62	0*	0*	(1)
		04/08/03	1760.73	12.44	1748.29	0*		(1)
		05/06/03	1760.73	12.58	1748.15	0*		(1)
		06/04/03	1760.73	12.64	1748.09	0*	0*	(1)
		07/02/03	1760.73	12.72	1748.01	0*		(1)
		08/05/03	1760.73	11.47	1749.26	0*		(1)
		09/03/03	1760.73	12.81	1747.92	0*	0*	(1)
		10/06/03	1760.73	12.48	1748.25	0*		(1)
		11/06/03	1760.73	12.41	1748.32	0*		(1)
		12/03/03	1760.73	12.74	1747.99	0*	0*	(1)
	ES-24	01/03/03	1728.67	DRY	---	0*		(2)
		02/03/03	1728.67	DRY	---	0*		(2)
		03/03/03	1728.67	DRY	---	0*	0*	(2)
		04/03/03	1728.67	23.12	1705.55	0*		(2)
		05/03/03	1728.67	21.48	1707.19	0*		(2)
		06/03/03	1728.67	21.21	1707.46	0*	0*	(2)
		07/03/03	1728.67	21.75	1706.92	0*		(2)
		08/03/03	1728.67	23.71	1704.96	0*		(2)
		09/03/03	1728.67	25.78	1702.89	0*	0*	(2)
		10/03/03	1728.67	25.95	1702.72	0*		(2)
		11/03/03	1728.67	DRY	---	0*		(2)
		12/03/03	1728.67	DRY	---	0*	0*	(2)
	ES-26	01/07/03	1748.01	29.18	1718.83	0*		(1)
		02/04/03	1748.01	28.76	1719.25	0*		(1)
		03/04/03	1748.01	27.54	1720.47	0*	0*	(1)
		04/08/03	1748.01	27.63	1720.38	0*		(1)
		05/06/03	1748.01	28.14	1719.87	0*		(1)
		06/04/03	1748.01	27.84	1720.17	0*	0*	(1)
		07/02/03	1748.01	28.04	1719.97	0*		(1)
		08/04/03	1748.01	20.46	1727.55	0*		(1)

See last page of Table XIV for footnotes and explanations.

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TABLE XIV

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
STL-IV ASU	ES-26	09/03/03	1748.01	27.88	1720.13	0*	0*	(1)
		10/06/03	1748.01	26.21	1721.80	0*		(1)
		11/03/03	1748.01	28.27	1719.74	0*		
		12/03/03	1748.01	25.77	1722.24	0*	0*	(1)
	ES-27	01/07/03	1740.67	28.23	1712.44	0*		(1)
		02/04/03	1740.67	28.82	1711.85	0*		(1)
		03/04/03	1740.67	27.89	1724.37	0*	0*	(1)
		04/08/03	1740.67	28.08	1712.59	0*		(1)
		05/06/03	1740.67	27.83	1712.84	0*		(1)
		06/04/03	1740.67	27.23	1724.37	0*	0*	(1)
		07/02/03	1740.67	27.31	1713.36	0*		(1)
		08/04/03	1740.67	21.72	1718.95	0*		
		09/03/03	1740.67	28.24	1712.43	0*	0*	(1)
		10/06/03	1740.67	28.21	1712.46	0*		(1)
		11/03/03	1740.67	29.05	1711.62	0*		
		12/03/03	1740.67	28.44	1712.23	0*	0*	(1)
	ES-30	01/07/03	1759.51	14.97	1744.54	0*		(1)
		02/04/03	1759.51	14.65	1744.86	0*		(1)
		03/04/03	1759.51	14.16	1749.21	0*	0*	(1)
		04/08/03	1759.51	15.11	1744.40	0*		(1)
		05/06/03	1759.51	15.49	1744.02	0*		(1)
		06/04/03	1759.51	15.68	1749.21	0*	0*	(1)
		07/02/03	1759.51	15.59	1743.92	0*		(1)
		08/05/03	1759.51	11.73	1747.78	0*		
		09/03/03	1759.51	15.17	1744.34	0*	0*	(1)
		10/06/03	1759.51	15.32	1744.19	0*		(1)
		11/06/03	1759.51	12.50	1747.01	0*		
		12/03/03	1759.51	15.38	1744.13	0*	0*	(1)
	ES-32	01/07/03	1740.65	DRY	---	0*		(1)
		02/04/03	1740.65	DRY	---	0*		(1)
		03/04/03	1740.65	DRY	---	0*	0*	(1)
		04/08/03	1740.65	DRY	---	0*		(1)
		04/28/03	1740.65	11.53	1729.12	0*		
		06/04/03	1740.65	DRY	---	0*	0*	(1)
		07/02/03	1740.65	DRY	---	0*		(1)
		08/04/03	1740.65	19.66	1720.99	0*		
		09/03/03	1740.65	DRY	---	0*	0*	(1)
		10/06/03	1740.65	DRY	---	0*		(1)
		11/03/03	1740.65	DRY	---	0*		
		12/03/03	1740.65	DRY	---	0*	0*	(1)
	HAR-17	01/07/03	1711.59	30.09	1632.59	0.09		(1)
		02/04/03	1711.59	26.54	1685.05	0.06		(1)
		03/04/03	1711.59	23.97	1687.62	0.0	0.05	(1)
		04/08/03	1711.59	23.84	1632.59	0*		(1)
		05/06/03	1711.59	22.67	1688.92	0*		(1)
		06/04/03	1711.59	22.84	1688.75	0*	0*	(1)

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TABLE XIV

SUMMARY OF EXTRACTION WELL WATER LEVELS AND FLOW RATES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Treatment System	Extraction Well	Water Level Measurement Date	Measuring Point Elevation (ft, MSL)	Depth to Water (feet)	Water Level Elevation (ft, MSL)	Average Monthly Flow Rate (gpm)	Average Quarterly Flow Rate (gpm)	Footnotes
STL-IV ASU	HAR-17	07/18/03	1711.59	22.89	1632.59	0*		(1)
		08/06/03	1711.59	22.97	1688.62	0*		
		09/03/03	1711.59	24.15	1687.44	0*	0*	(1)
		10/06/03	1711.59	25.32	1686.27	0*		(1)
		11/03/03	1711.59	26.56	1685.03	0*		
		12/04/03	1711.59	27.11	1684.48	0*	0*	(1)
	HAR-18	01/07/03	1749.41	31.25	1686.41	0*		(1)
		02/04/03	1749.41	29.78	1719.63	0*		(1)
		03/04/03	1749.41	28.92	1720.49	0*	0*	(1)
		04/08/03	1749.41	29.02	1686.41	0*		(1)
		05/06/03	1749.41	29.12	1720.29	0*		(1)
		06/04/03	1749.41	28.87	1720.54	0*	0*	(1)
		07/18/03	1749.41	29.31	1720.10	0*		(1)
		08/04/03	1749.41	22.65	1726.76	0*		
		09/03/03	1749.41	28.83	1720.58	0*	0*	(1)
		10/06/03	1749.41	28.65	1720.76	0*		(1)
		11/03/03	1749.41	25.86	1723.55	0*		
		12/04/03	1749.41	27.98	1721.43	0*	0*	(1)

See last page of Table XIV for footnotes and explanations.

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TABLE XIV
FOOTNOTES AND EXPLANATIONS

(C)	=	Depth to water measured from top of casing. During the monitoring period, pumps had been removed from several wells to allow hydrogeologic testing.
gpm	=	Gallons per minute.
NA	=	Not available. Well was not monitored or transducer was inoperable.
MSL	=	Mean sea level.
(---)	=	No data available/not applicable.
(1)	=	Water level measured by EnviroSolve Corporation.
(2)	=	Water level measured by Montgomery Watson.
(*)	=	Several extraction wells were inactive due to ongoing Shallow Zone Groundwater Investigation (Ogden, 2000) and the Chatsworth Formation Operable Unit Investigation (Montgomery Watson, 2000b).
(**)	=	Well is currently equipped with a FLUTe discrete interval monitoring system. See Table II for data.
ASU	=	Air stripping unit.
UV/H ₂ O ₂	=	Ultraviolet light/ peroxidation.
UTM	=	Unable to measure; obstruction in well.

TABLE XV
SUMMARY OF 2003 PERMITTED GROUNDWATER REMEDIATION FACILITIES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

		Gallons x 1,000												Total Annual Pumpage	Total Pumpage to Date
Remediation System		Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sept	Oct	Nov	Dec		
Extraction Well(s)															
Delta ASU	WS-09A	670.4	1,360.9	NR	292.1	496.0	15.0	465.1	214.8	499.7	38.5	265.9	314.2	4632.6	411771.3
	HAR-07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2789.2
Alfa ASU	WS-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	510871.8
Bravo ASU	WS-09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	62893.5
	RD-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	40362.9
	RD-09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6106.3
	ES-21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	461.9
	ES-22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	682.8
Area I Road ASU	RD-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80122.6
	RD-02	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71702.1
	ES-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	60.4
	ES-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	987.6
	ES-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	425.6
	ES-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	308.6
	ES-06	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	882.5
ES-07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	48.3	
WS-5 Area	WS-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	540394.8
UV/H ₂ O ₂	ES-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.1
	HAR-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	765.4
	HAR-16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1028.1
STL-IV ASU	ES-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	73.1
	ES-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	277.1
	ES-23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	127.7
	ES-24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.8
	ES-26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2430.4
	ES-27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	388.1
	ES-30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1825.4
	ES-32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.7
	HAR-17	4.1	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7	3185.0
	HAR-18	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	726.3
	ECL Sump	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1061.0
	ECL FD	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2792.7
Total System		674.5	1,363.6	0.0	292.1	496.0	15.0	465.1	214.8	499.7	38.5	265.9	314.2	4639.4	1745504.0

ASU = Air stripping unit

NR=Data not reported

UV/H₂O₂ = Ultraviolet light/peroxidation

NOTES: Remediation system monitoring conducted by EnviroSolve Corporation. Pumpage data and cumulative pumpage provided by EnviroSolve Corporation. Several extraction wells were inactive due to ongoing Shallow Zone Groundwater Investigation (Ogden, 2000) and Chatsworth Formation Operable Unit Investigation (Montgomery Watson, 2000b).

TABLE XVI
SUMMARY OF 2003 GROUNDWATER EXTRACTIONS, INTERIM SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Interim System		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total Annual Pumpage
Extraction Well(s)		(gallons x 1,000)												
RMHF	RD-63	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.8	13.8	28.9	28.1	85.6
FSDF	RD-21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.00
	RS-54	0.052	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
B/059	RD-24	22.8	24.5	31.2	25.7	34.8	UTM	UTM	UTM	10.3	24.4	23.1	24.8	221.6
	RD-25	7.8	8.0	9.1	7.2	8.8	UTM	UTM	UTM	9.9	UTM	UTM	0.3	51.1
	RD-28	6.2	6.0	9.0	7.5	9.7	UTM	UTM	UTM	10.6	UTM	UTM	0.4	49.4
	S-2 Sump	0.0	0.0	0.0	0.0	0.0	UTM	UTM	UTM	UTM	UTM	UTM	UTM	0.0
	B/056 Pit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Interim System		36.9	38.5	49.3	40.4	53.3	0.0	0.0	0.0	45.6	38.2	52.0	53.6	407.8

Note: Remediation system monitoring conducted by EnviroSolve Corporation. Pumpage data and cumulative pumpage provided by EnviroSolve Corporation.

UTM: Data not collected due to the B/059 demolition.

TABLE XVII
SUMMARY OF WATER QUALITY RESULTS
FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Sample Location		Date Sampled	TCE (ug/l)	1,2-DCE (ug/l)		Perchlorate (ug/l)	SVOCs (ug/l)	VOCs Removed	
				cis	trans			By Quarter (lbs)	To Date (lbs)
Delta ASU	Influent	01/15/03	Not Operating*					1.3	1279.7
		02/04/03	150	66	5.0 U	4 U	---		1280.9
		03/10/03	3.9	6.7	0.27 U	4 U	---		1281.0
		04/23/03	6.5	2.1	0.5 U	4 U	---		1281.0
		05/06/03	0.65	0.5 U	5.0 U	4 U	---	1281.0	
		06/10/03	53	20	0.72	4 U	---	1281.3	
		07/25/03	440	150	4.2	4 U	---	1283.7	
		08/13/03	830	330	9	4 U	---	1286.4	
		09/04/03	1300	390	11	4 U	---	1289.5	
		10/06/03	1700	540	15	4 U	---	1298.9	
		11/25/03	1800	590	16	4 U	---	1299.7	
		12/04/03	1600	530	15	4 U	---	1304.5	
	Primary Effluent	01/15/03	Not Operating*						
		02/04/03	0.5 U	0.6	0.5 U				
		03/10/03	0.26 U	0.32 U	0.27 U				
		04/23/03	0.5 U	0.5 U	0.5 U				
		05/06/03	0.5 U	0.5 U	0.5 U				
		06/10/03	0.5 U	0.5 U	0.5 U				
		07/25/03	0.5 U	0.5 U	0.5 U				
		08/13/03	0.59	0.5 U	0.5 U				
		09/04/03	1.4	0.91	0.5 U				
		10/06/03	0.61	0.5U	0.5 U				
		11/25/03	0.5U	0.5U	0.5U				
		12/04/03	0.55	0.5U	0.5U				
	Secondary Effluent	01/15/03	Not Operating*						
		02/04/03	0.5 U	0.5 U	0.5 U				
		03/10/03	0.26 U	0.32 U	0.27 U				
		04/23/03	0.5 U	0.5 U	0.5 U				
		05/06/03	0.5 U	0.5 U	0.5 U				
		06/10/03	0.5 U	0.5 U	0.5 U				
		07/25/03	0.5 U	0.5 U	0.5 U				
		08/13/03	0.5 U	0.5 U	0.5 U				
		09/04/03	0.5 U	0.5 U	0.5 U				
		10/06/03	0.5U	0.5U	0.5U				
		11/25/03	0.5U	0.5U	0.5U				
		12/04/03	0.58	0.5U	0.5U				
Alfa ASU	Influent	01/15/03	Not Operating*					0.0	460.2
		02/04/03							460.2
		03/10/03							460.2
		04/23/03							460.2
		05/06/03						0.0	460.2
		06/10/03							460.2
		07/25/03							460.2
		08/13/03							460.2
		09/04/03						0.0	460.2
		10/06/03							460.2
		11/25/03							460.2
		12/04/03							460.2
	Primary Effluent	01/15/03	Not Operating*						
		02/04/03							
		03/10/03							
		04/23/03							
		05/06/03							
		06/10/03							
		07/25/03							
		08/13/03							
		09/04/03							

TABLE XVII
SUMMARY OF WATER QUALITY RESULTS
FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Sample Location		Date Sampled	TCE (ug/l)	1,2-DCE (ug/l)		Perchlorate (ug/l)	SVOCs (ug/l)	VOCs Removed	
				cis	trans			By Quarter (lbs)	To Date (lbs)
Alfa ASU	Primary Effluent	10/06/03	Not Operating*						
		11/25/03							
		12/04/03							
	Secondary Effluent	01/15/03	Not Operating*						
		02/04/03							
		03/10/03							
		04/23/03							
		05/06/03							
		06/10/03							
		07/25/03							
		08/13/03							
		09/04/03							
		10/06/03							
		11/25/03							
		12/04/03							
Bravo ASU	Influent	01/15/03	Not Operating*					0.0	126.1
		02/04/03							126.1
		03/10/03							126.1
		04/23/03						0.0	126.1
		05/06/03							126.1
		06/04/03							126.1
		07/25/03						0.0	126.1
		08/13/03							126.1
		09/04/03							126.1
		10/06/03						0.0	126.1
		11/25/03							126.1
		12/04/03							126.1
	Primary Effluent	01/15/03	Not Operating*						
		02/04/03							
		03/10/03							
		04/23/03							
		05/06/03							
		06/04/03							
		07/25/03							
		08/13/03							
		09/04/03							
		10/06/03							
		11/25/03							
		12/04/03							
	Secondary Effluent	01/15/03	Not Operating*						
		02/04/03							
		03/10/03							
		04/23/03							
		05/06/03							
		06/04/03							
		07/25/03							
		08/13/03							
		09/04/03							
		10/06/03							
		11/25/03							
		12/04/03							
WS-5 UV/H ₂ O ₂	Influent	01/15/03	Not Operating*					0.0	225.0
		02/04/03							225.0
		03/10/03							225.0
		04/23/03						0.0	225.0
		05/06/03							225.0
		06/04/03							225.0

TABLE XVII
SUMMARY OF WATER QUALITY RESULTS
FOR PERMITTED GROUNDWATER REMEDIATION FACILITIES, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Sample Location		Date Sampled	TCE (ug/l)	1,2-DCE (ug/l)		Perchlorate (ug/l)	SVOCs (ug/l)	VOCs Removed	
				cis	trans			By Quarter (lbs)	To Date (lbs)
WS-5 UV/H ₂ O ₂	Influent	07/25/03	Not Operating*					0.0	225.0
		08/13/03							225.0
		09/04/03							225.0
		10/06/03						0.0	225.0
		11/25/03							225.0
		12/04/03							225.0
	Effluent	01/15/03	Not Operating*						
		02/04/03							
		03/10/03							
		04/23/03							
		05/06/03							
		06/04/03							
		07/25/03							
		08/13/03							
		09/04/03							
		10/06/03							
		11/25/03							
		12/04/03							
STL-IV ASU	Influent	01/15/03	Not Operating*					0.0	81.6
		02/04/03	140	37	10 U	4U	---		81.6
		03/10/03	Not Operating*						0.0
		04/23/03						81.6	
		05/06/03						81.6	
		06/04/03						0.0	81.6
		07/25/03						0.0	81.6
		08/13/03							81.6
		09/04/03							81.6
		10/06/03						0.0	81.6
		11/25/03							81.6
		12/04/03							81.6
	Primary Effluent	01/15/03	Not Operating*						
		02/04/03	0.5 U	0.5 U	0.5 U				
		03/10/03	Not Operating*						
		04/23/03							
		05/06/03							
		06/04/03							
		07/25/03							
		08/13/03							
		09/04/03							
		10/06/03							
		11/25/03							
		12/04/03							
Secondary Effluent	01/15/03	Not Operating*							
	02/04/03	0.5 U	0.5 U	0.5 U					
	03/10/03	Not Operating*							
	04/23/03								
	05/06/03								
	06/04/03								
	07/25/03								
	08/13/03								
	09/04/03								
	10/06/03								
	11/25/03								
	12/04/03								

TABLE XVII
FOOTNOTES AND EXPLANATIONS

Page 4 of 4

SVOCs	=	Semi-volatile organic compounds.
U	=	Not detected; numerical value is the reporting limit for that compound.
TCE	=	Trichloroethylene.
1,2-DCE	=	1,2-Dichloroethylene.
ug/l	=	Micrograms per liter.
lbs	=	Pounds.
ASU	=	Air stripping unit.
UV/H ₂ O ₂	=	Ultraviolet light/ peroxidation.
(*)	=	Several extraction wells were inactive due to the ongoing Shallow Zone Groundwater Investigation (Ogden, 2000) and the Chatsworth Formation Operable Unit Investigation (Montgomery Watson, 2000b).
---	=	Not analyzed.

NOTES:

Samples analyzed for TCE and 1,2-DCE by EPA Method 8010B or 8260B; perchlorate by modified EPA Method 300.0.

All Groundwater Remediation Facilities (GRF) water quality samples were collected by EnviroSolve Corporation personnel and analyzed by Del Mar Analytical.

Figures



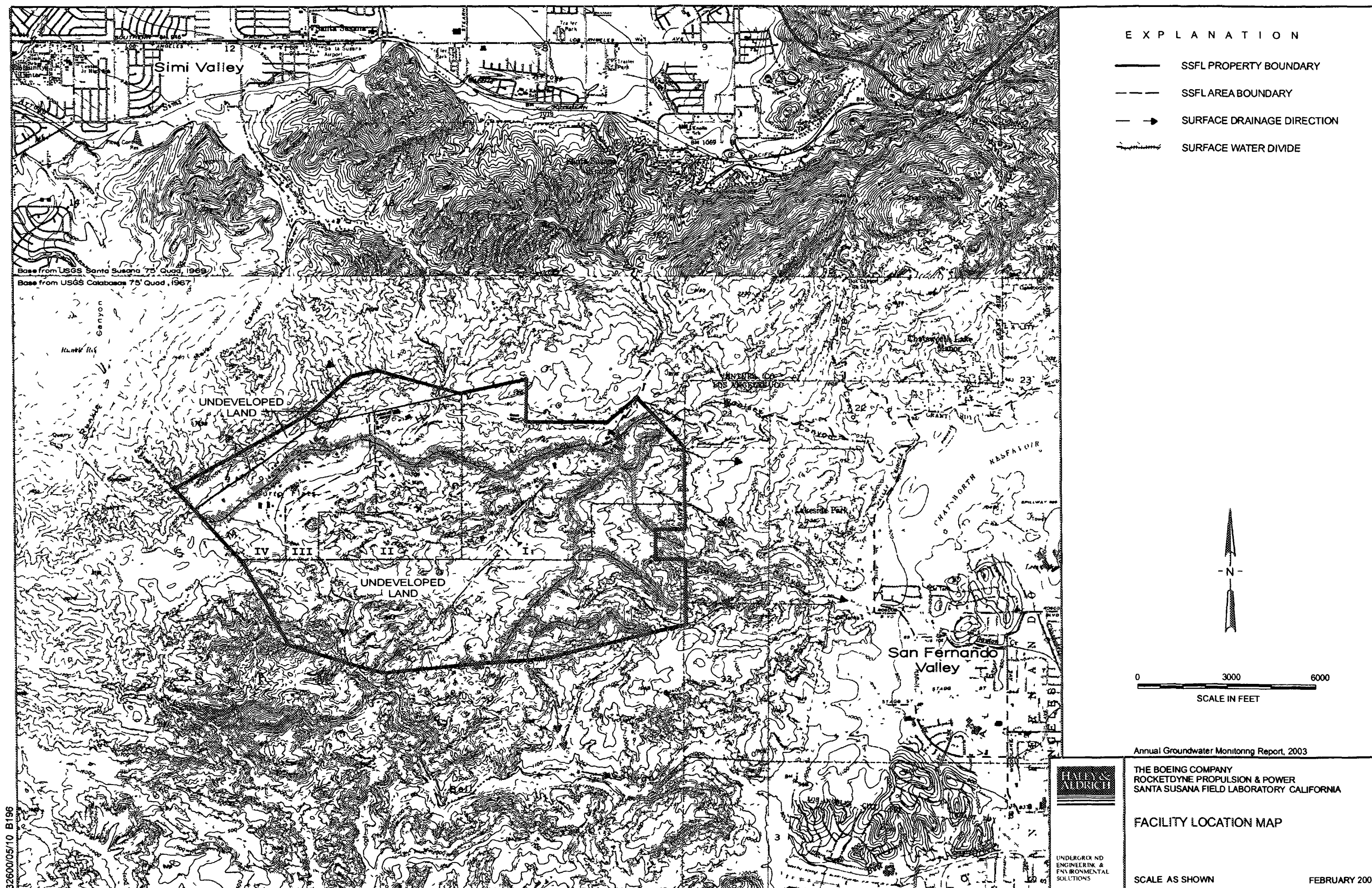
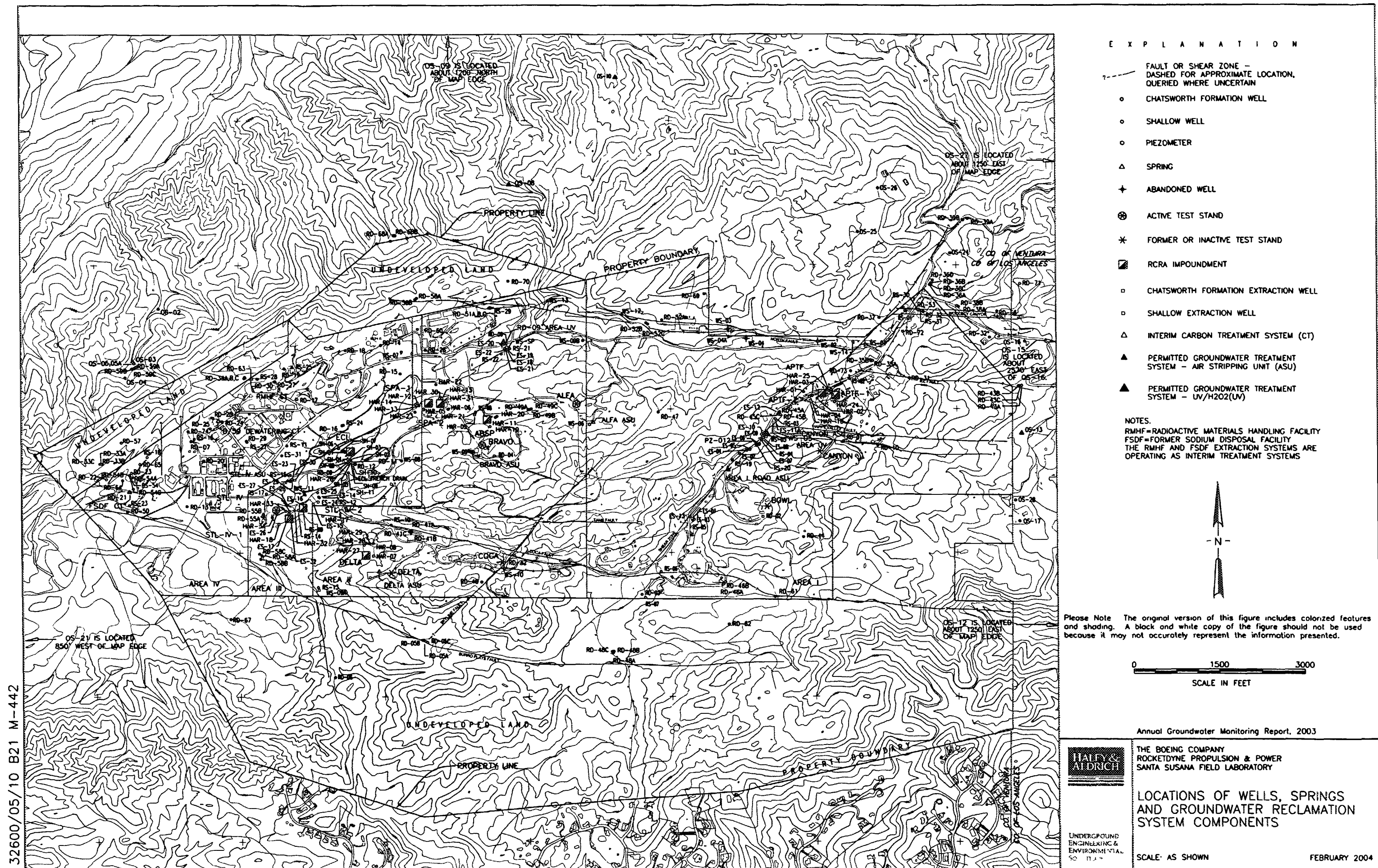
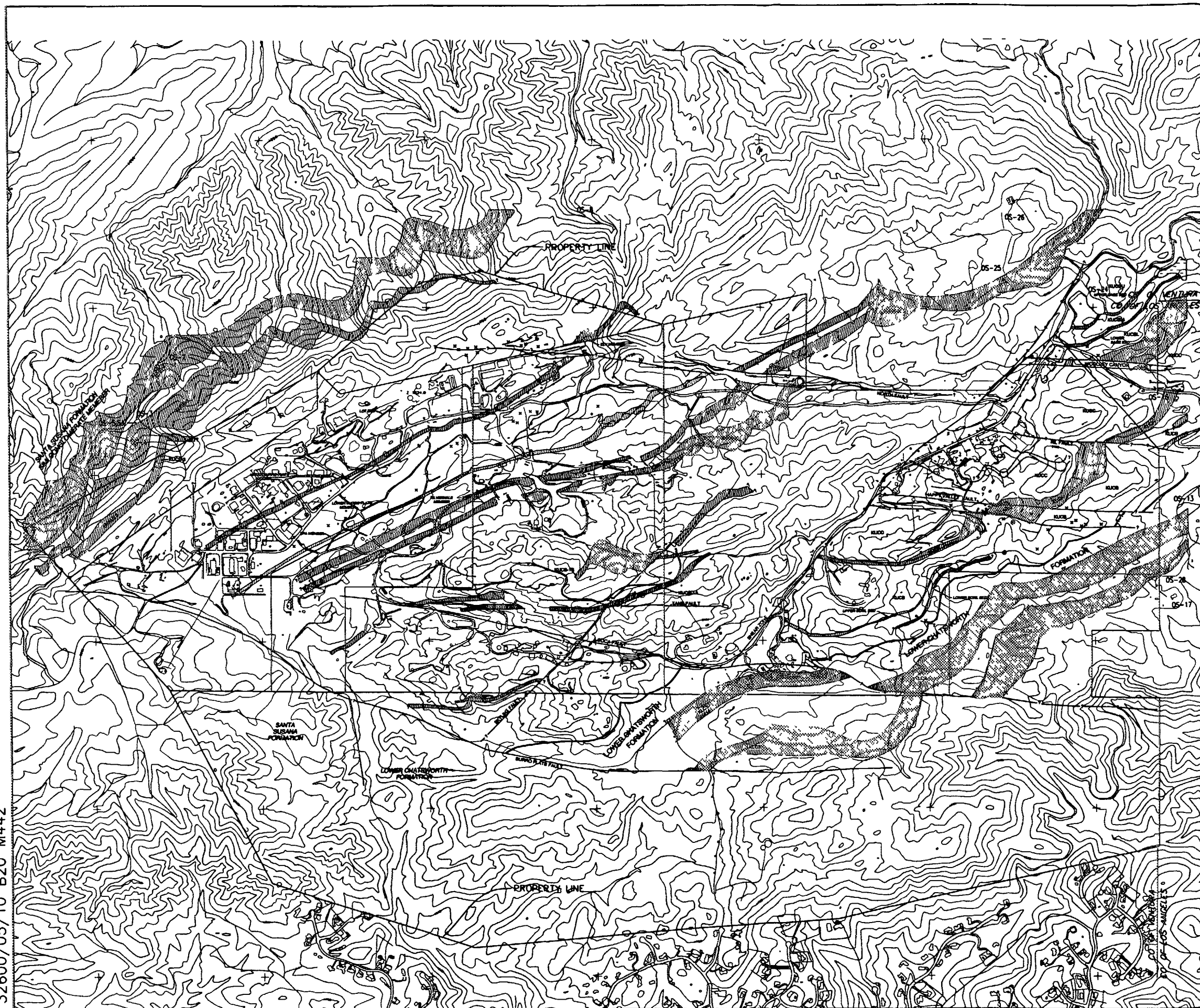


FIGURE 1



32600/05/10 B20 M442



E X P L A N A T I O N

FAULT OR SHEAR ZONE -
DASHED FOR APPROXIMATE LOCATION,
QUERIED WHERE UNCERTAIN

STRATIGRAPHIC COLUMN
WESTERN SSFL

- Santa Susana Formation
Simi Conglomerate Member
KUCS-3
Upper Burro Flats Member
Lot Bed
ELV Member
Lower Burro Flats Member
Spa Member
Silverdale Member
KUCS-2
KUCS-1B
KUCS-1A

STRATIGRAPHIC COLUMN
EASTERN SSFL

- Shale 2 - KUCS-2
Upper Sage Member - KUCSU
Upper Line Bed
Middle Sage Member - KUCSM
Lower Line Bed
Lower Sage Member - KUCSL
Woolsey Member - KUCW
Canyon Member - KUCC
Upper Canyon Bed
Lower Canyon Bed
Happy Valley Member - KUCH
Bowl Member - KUCB
Upper Bowl Bed
Lower Bowl Bed
Lower Chatsworth Formation
KLCS

Geologic Map and Stratigraphy
provided by
Montgomery Watson Harza
Geologic Characterization of
the Eastern Portion of SSFL,
Technical Memorandum, MWH,
2/22/02

Note. The geology of the
area west of the Shear Zone
which lies south of KUCS-2
and north of the Burro
Flats Fault is preliminary
as work is in progress

Please Note: The original version of this figure includes colorized features
and shading. A black and white copy of the figure should not be used
because it may not accurately represent the information presented.

0 1500 3000
SCALE IN FEET

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GEOLOGIC MAP

SCALE AS SHOWN

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FIGURE 3

32600/05/10 B19

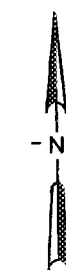


E X P L A N A T I O N

--- FAULT OR SHEAR ZONE -
DASHED FOR APPROXIMATE LOCATION,
QUERIED WHERE UNCERTAIN

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Northeast Groundwater units modified from those of the 2001 Annual Report based on Plate 6 Cross Section G-A, Plan and Section Views of the Northeast Groundwater Units, Montgomery Watson Horza



0 1500 3000

SCALE IN FEET

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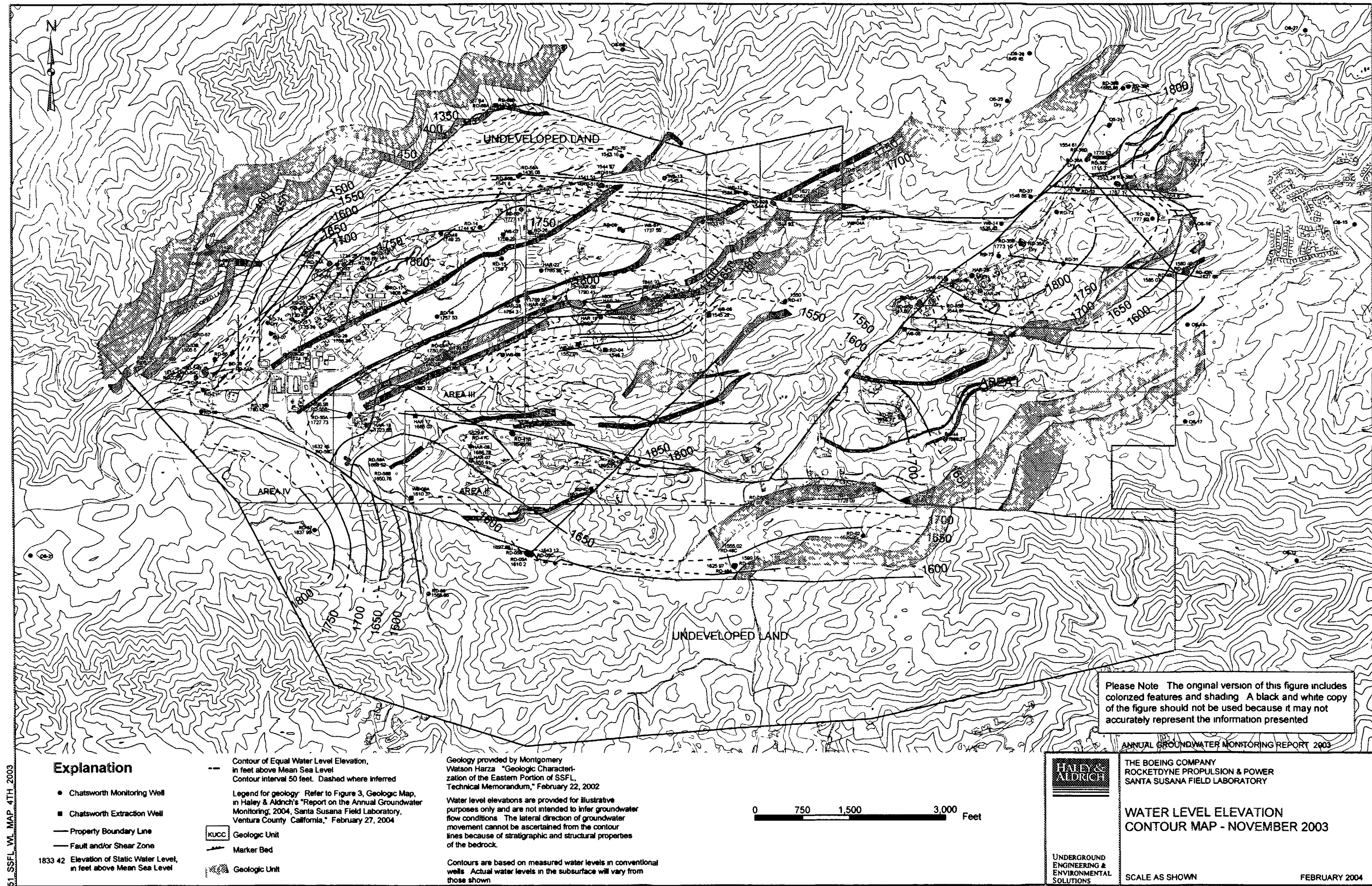
GROUNDWATER UNITS

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SCALE: AS SHOWN

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FIGURE 4



51 SSFL WL MAP 4TH 2003

Explanation

- Chatsworth Monitoring Well
- Chatsworth Extraction Well
- Property Boundary Line
- Fault and/or Shear Zone
- 1833 42 Elevation of Static Water Level, in feet above Mean Sea Level

--- Contour of Equal Water Level Elevation, in feet above Mean Sea Level
Contour interval 50 feet. Dashed where inferred

Legend for geology: Refer to Figure 3, Geologic Map, in Haley & Aldrich's "Report on the Annual Groundwater Monitoring, 2004, Santa Susana Field Laboratory, Ventura County California," February 27, 2004

- Geologic Unit
- Marker Bed
- Geologic Unit

Geology provided by Montgomery Watson Harza "Geologic Characterization of the Eastern Portion of SSFL, Technical Memorandum," February 22, 2002

Water level elevations are provided for illustrative purposes only and are not intended to infer groundwater flow conditions. The lateral direction of groundwater movement cannot be ascertained from the contour lines because of stratigraphic and structural properties of the bedrock.

Contours are based on measured water levels in conventional wells. Actual water levels in the subsurface will vary from those shown.

0 750 1,500 3,000 Feet



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WATER LEVEL ELEVATION
CONTOUR MAP - NOVEMBER 2003

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FIGURE 5



Wells with FLUTes during 2003 Sampling
 RD-07, RD-10, RD-21, RD-22, RD-23, RD-31,
 RD-33A, RD-50, RD-53, RD-54A, RD-57,
 RD-64, RD-65, RD-72, RD-73, HAR-01,
 HAR-16, HAR-24, OS-24

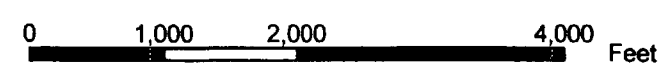
Please Note The original version of this figure includes
 colorized features and shading. A black and white copy
 of the figure should not be used because it may not
 accurately represent the information presented

32600/05/10 M442 56 SSFL

Legend

- Maximum Concentration ≥ 100 ug/L
- Maximum Concentration ≥ 5 and < 100 ug/L
- Maximum Concentration < 5 ug/L
- Not Detected (ND)
- Sampled, Laboratory, field, or equipment contaminant, value not plotted
- Wells Not Sampled
- Shallow Monitoring Well
- Shallow Extraction Well
- Property Boundary Line
- Faults

J = Estimated value Analyte detected at a
 level less than the Reporting Limit (RL)
 and greater than or equal to the Method
 Detection Limit (MDL)



Laboratory, field, and equipment contaminants
 included in report tables are not plotted on this
 figure



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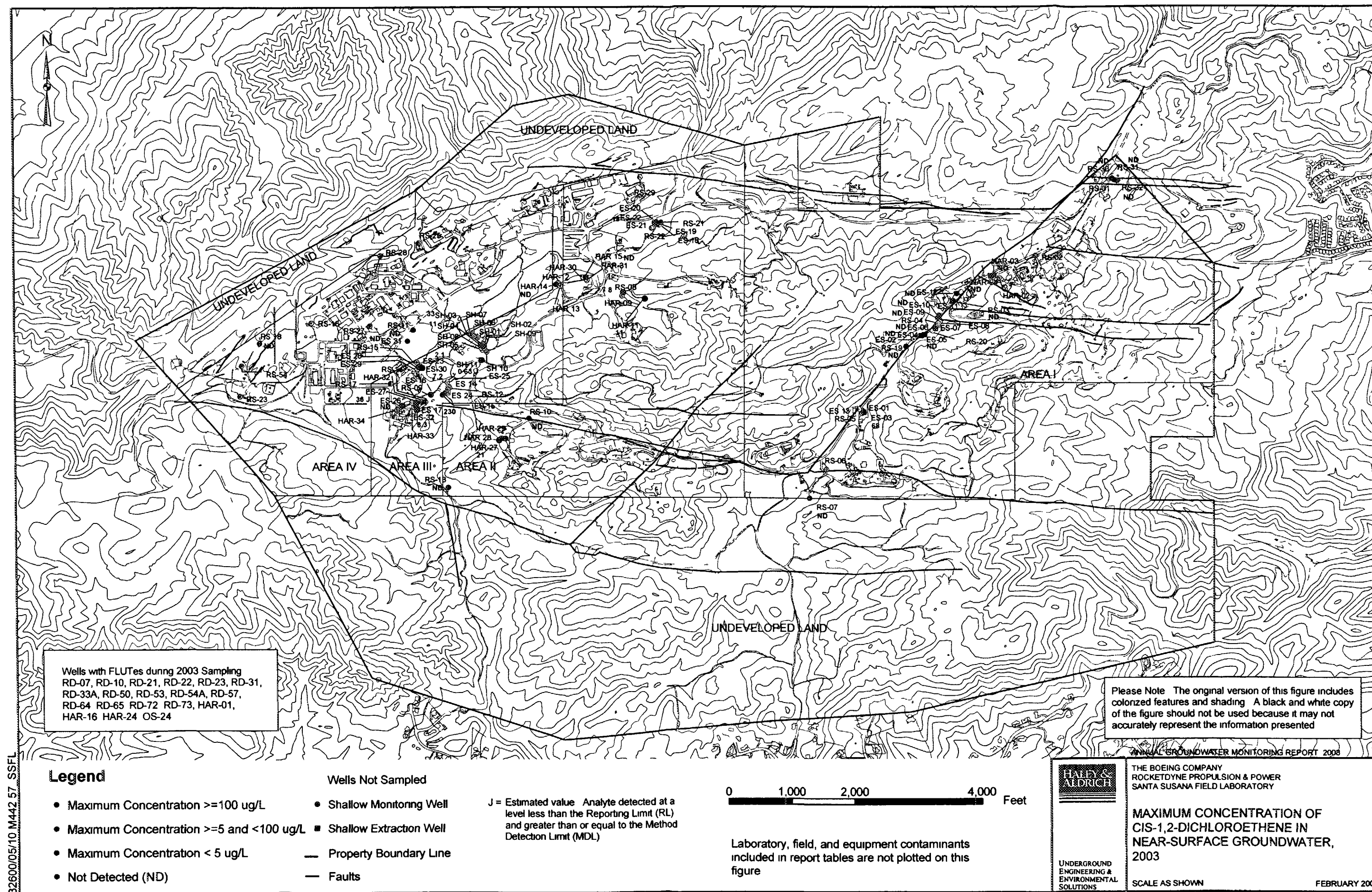
**MAXIMUM CONCENTRATION OF
 TCE IN NEAR-SURFACE
 GROUNDWATER, 2003**

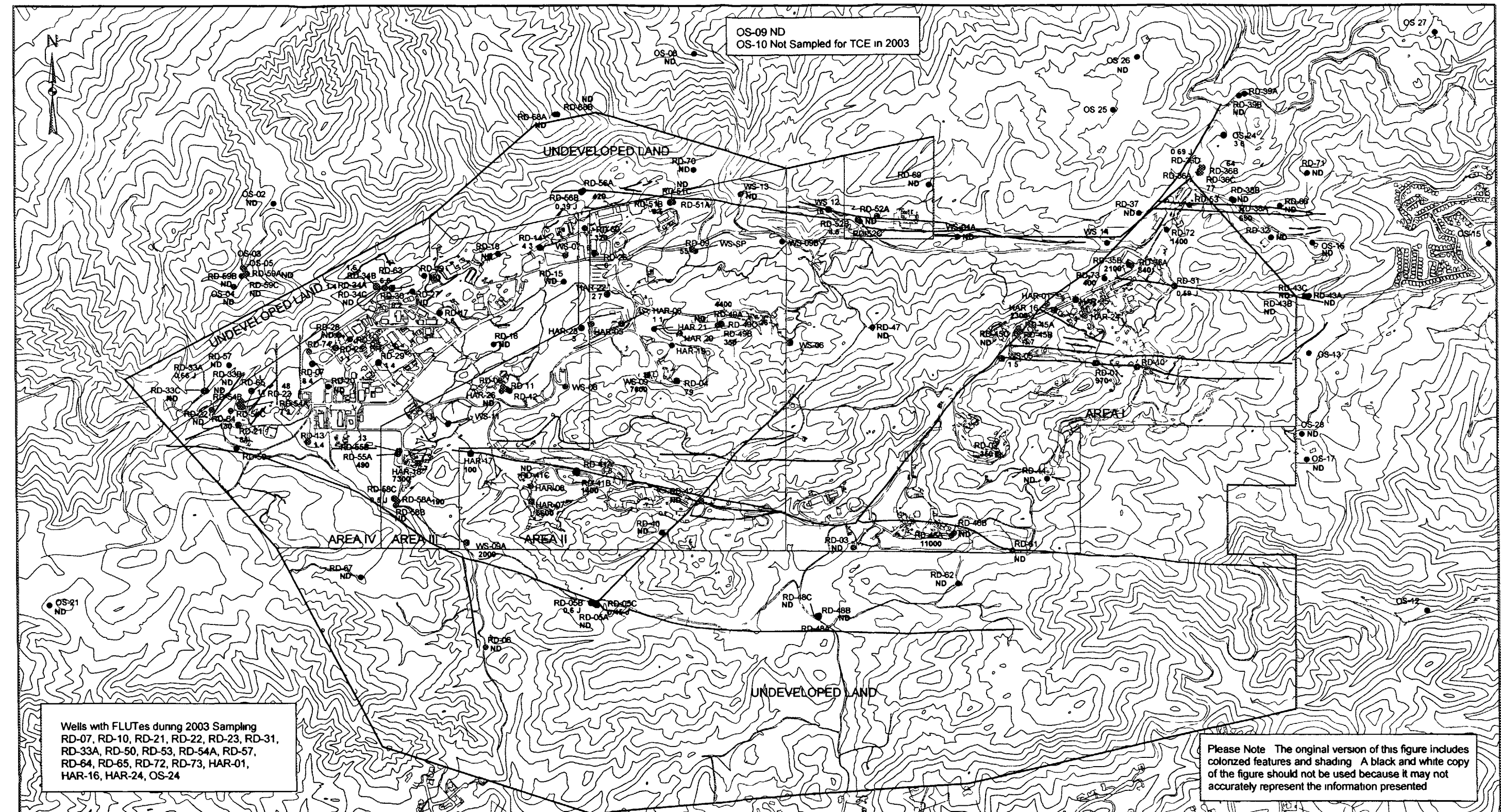
SCALE AS SHOWN

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FIGURE 6

32600/05/10 M442 57 SSFL





Wells with FLUTes during 2003 Sampling
 RD-07, RD-10, RD-21, RD-22, RD-23, RD-31,
 RD-33A, RD-50, RD-53, RD-54A, RD-57,
 RD-64, RD-65, RD-72, RD-73, HAR-01,
 HAR-16, HAR-24, OS-24

Please Note The original version of this figure includes
 colored features and shading. A black and white copy
 of the figure should not be used because it may not
 accurately represent the information presented

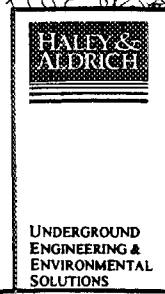
Legend

- Maximum Concentration ≥ 100 ug/L
- Maximum Concentration ≥ 5 and < 100 ug/L
- Maximum Concentration < 5 ug/L
- Not Detected (ND)
- Sampled Laboratory, field, or equipment contaminant, value not plotted
- Chatsworth Monitoring Well
- Chatsworth Extraction Well
- Property Boundary Line
- Faults

J = Estimated value Analyte detected at a
 level less than the Reporting Limit (RL)
 and greater than or equal to the Method
 Detection Limit (MDL)



Laboratory, field, and equipment contaminants
 included in report tables are not plotted on this
 figure



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**MAXIMUM CONCENTRATION OF
 TCE IN CHATSWORTH FORMATION
 GROUNDWATER, 2003**

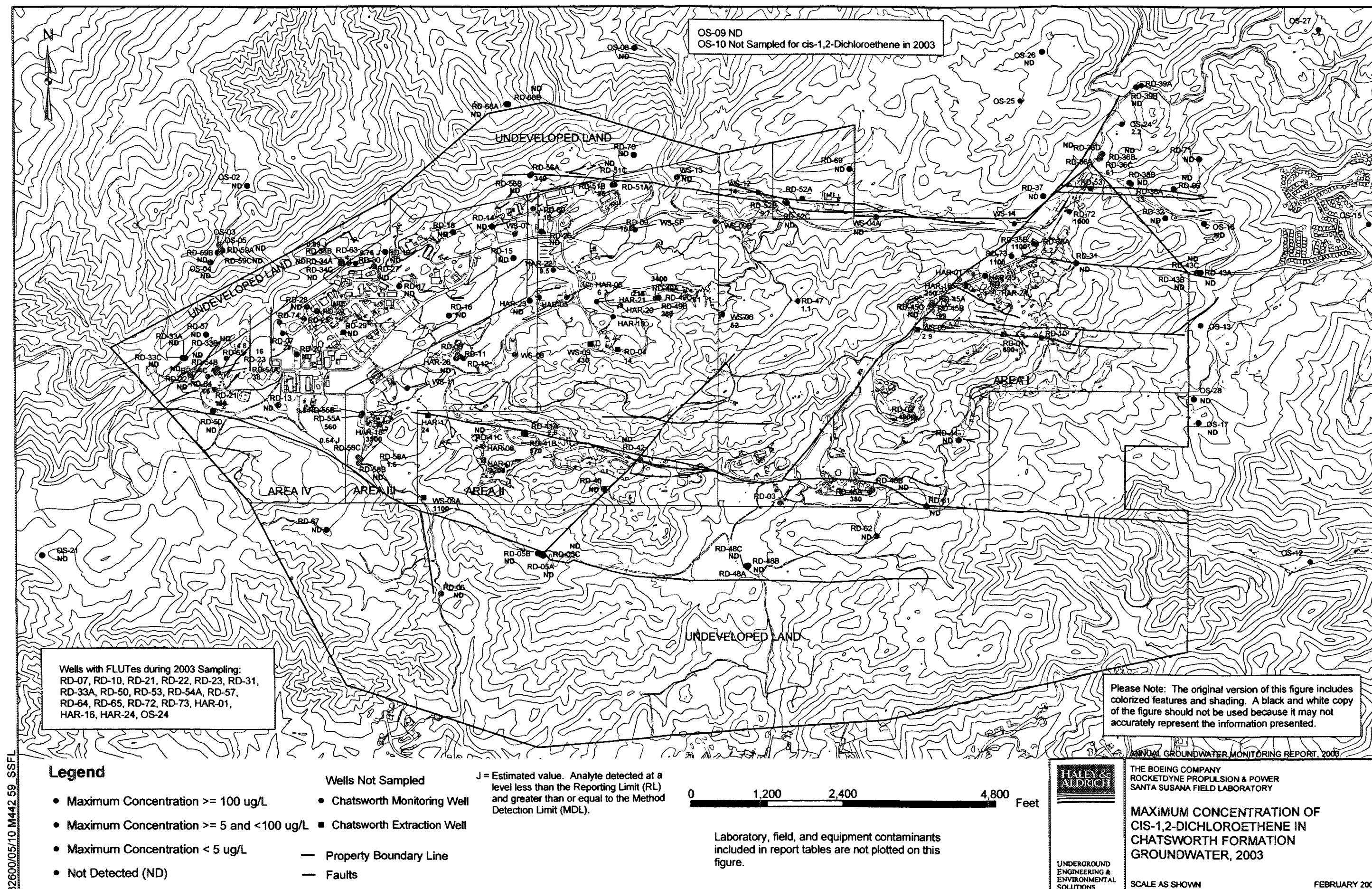
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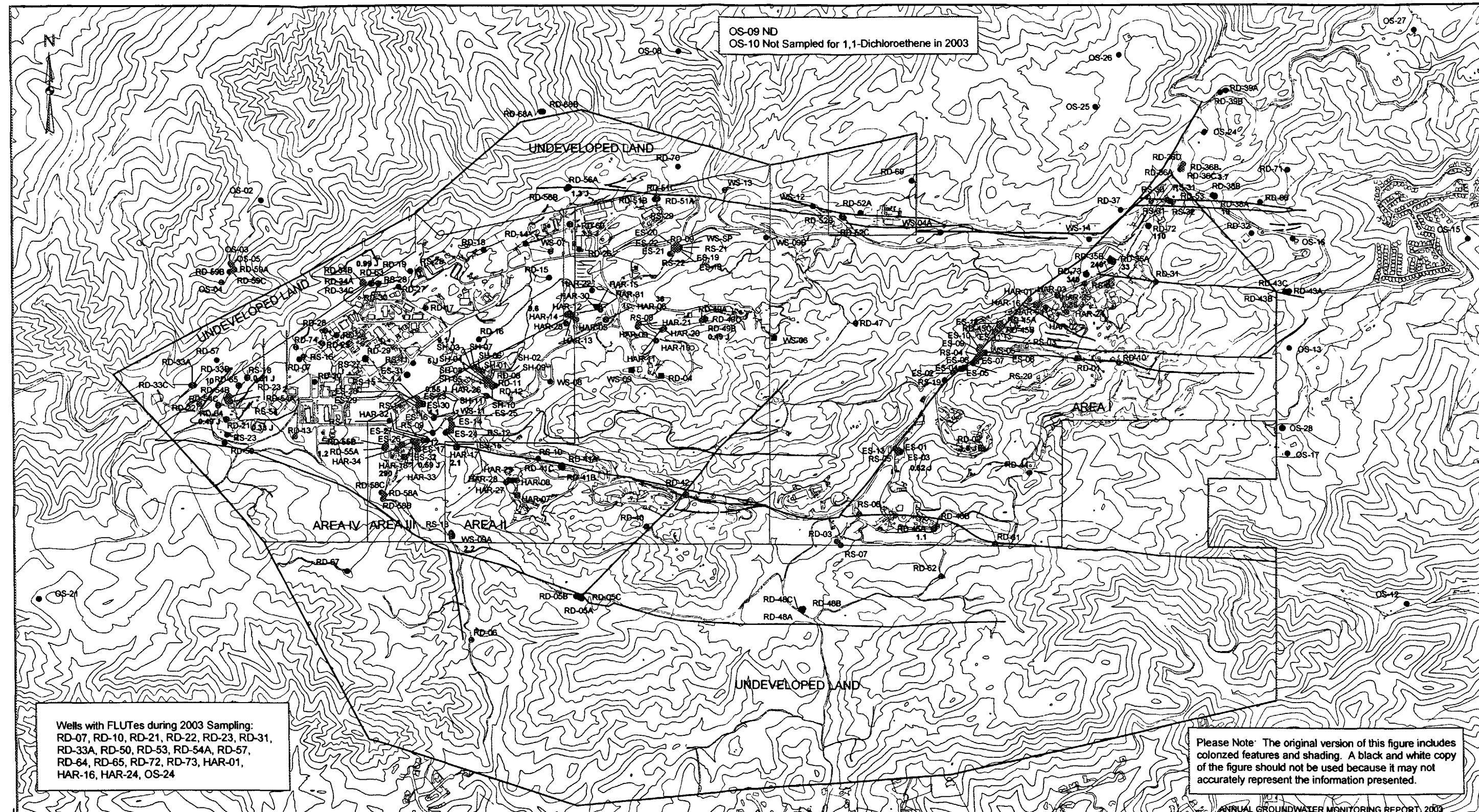
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FIGURE 8

32600/05/10 M442 58 SSFL

32600/05/10 M442 59 SSFL





32600/05/10 M442 60 SSFL

Legend

- Detected Concentration (ug/L) in Chatsworth Fm. Well
- Detected Concentration (ug/L) in Shallow Well
- No 1,1-Dichloroethene Detections in 2003 Sampling
- Property Boundary Line
- Faults
- Shallow Monitoring Well
- Shallow Extraction Well
- Chatsworth Monitoring Well
- Chatsworth Extraction Well

J = Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).

0 900 1,800 3,600 Feet

Laboratory, field, and equipment contaminants included in report tables are not plotted on this figure.



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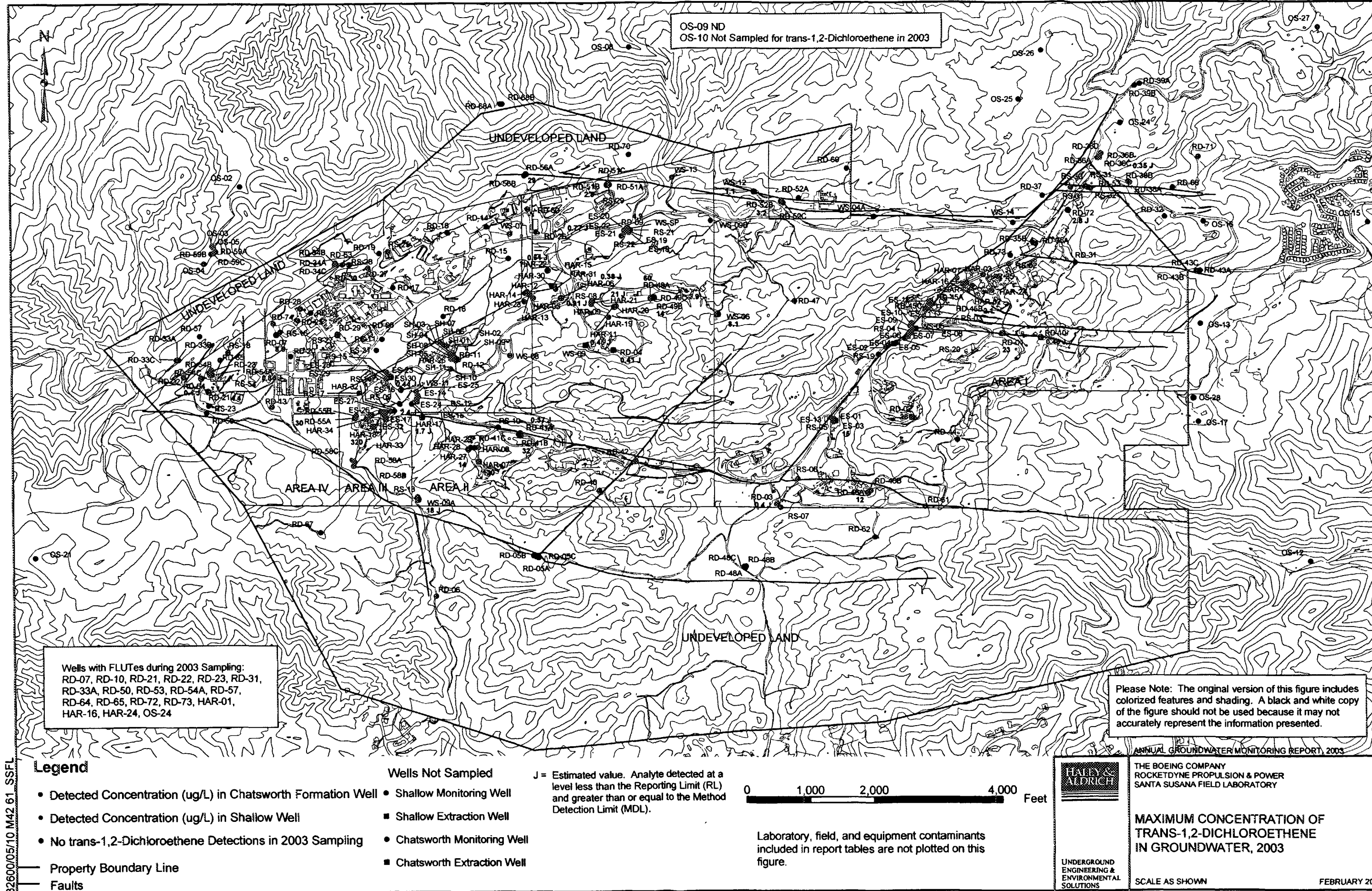
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MAXIMUM CONCENTRATION OF
1,1-DICHLOROETHENE IN
GROUNDWATER, 2003

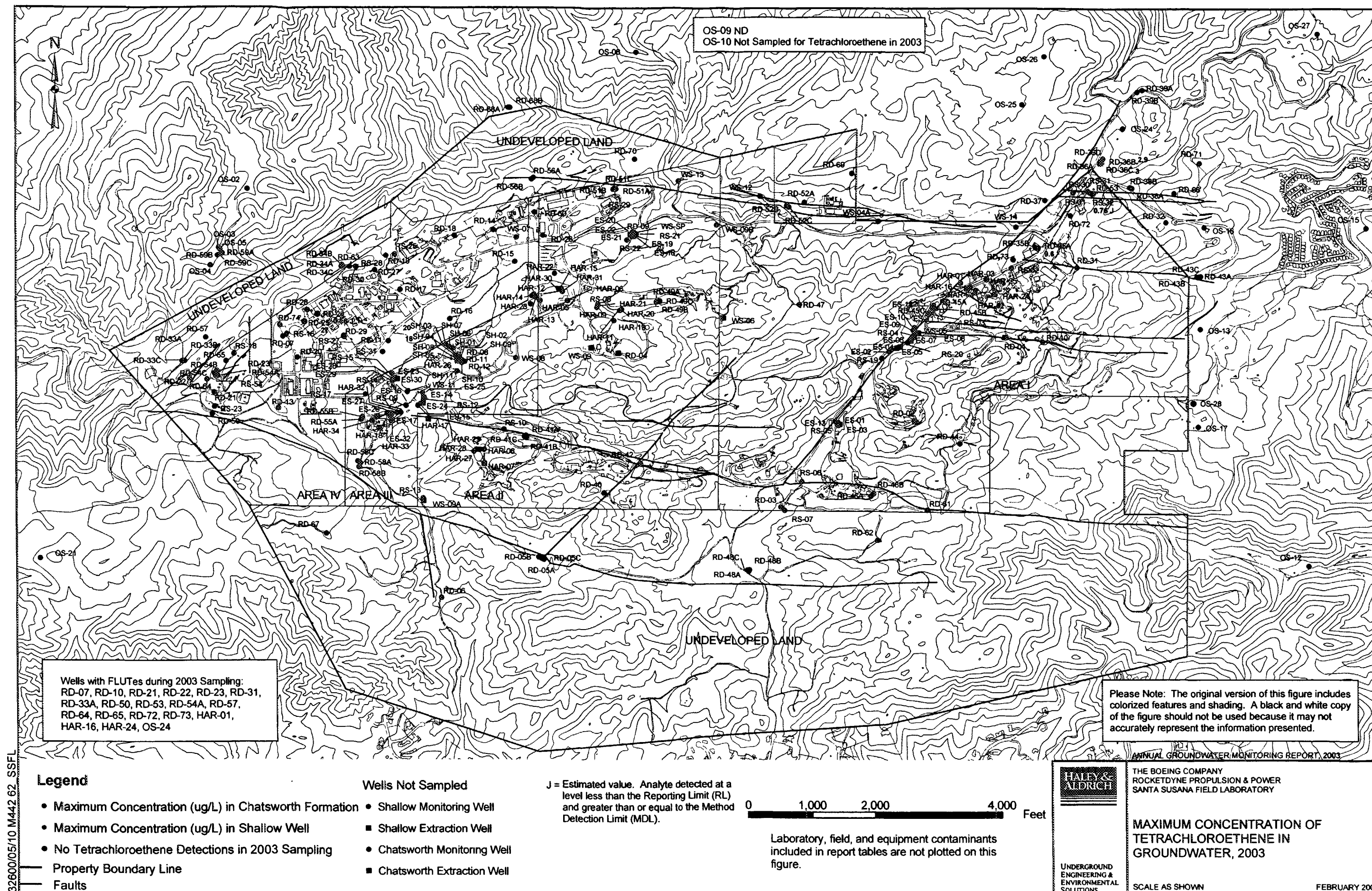
SCALE AS SHOWN

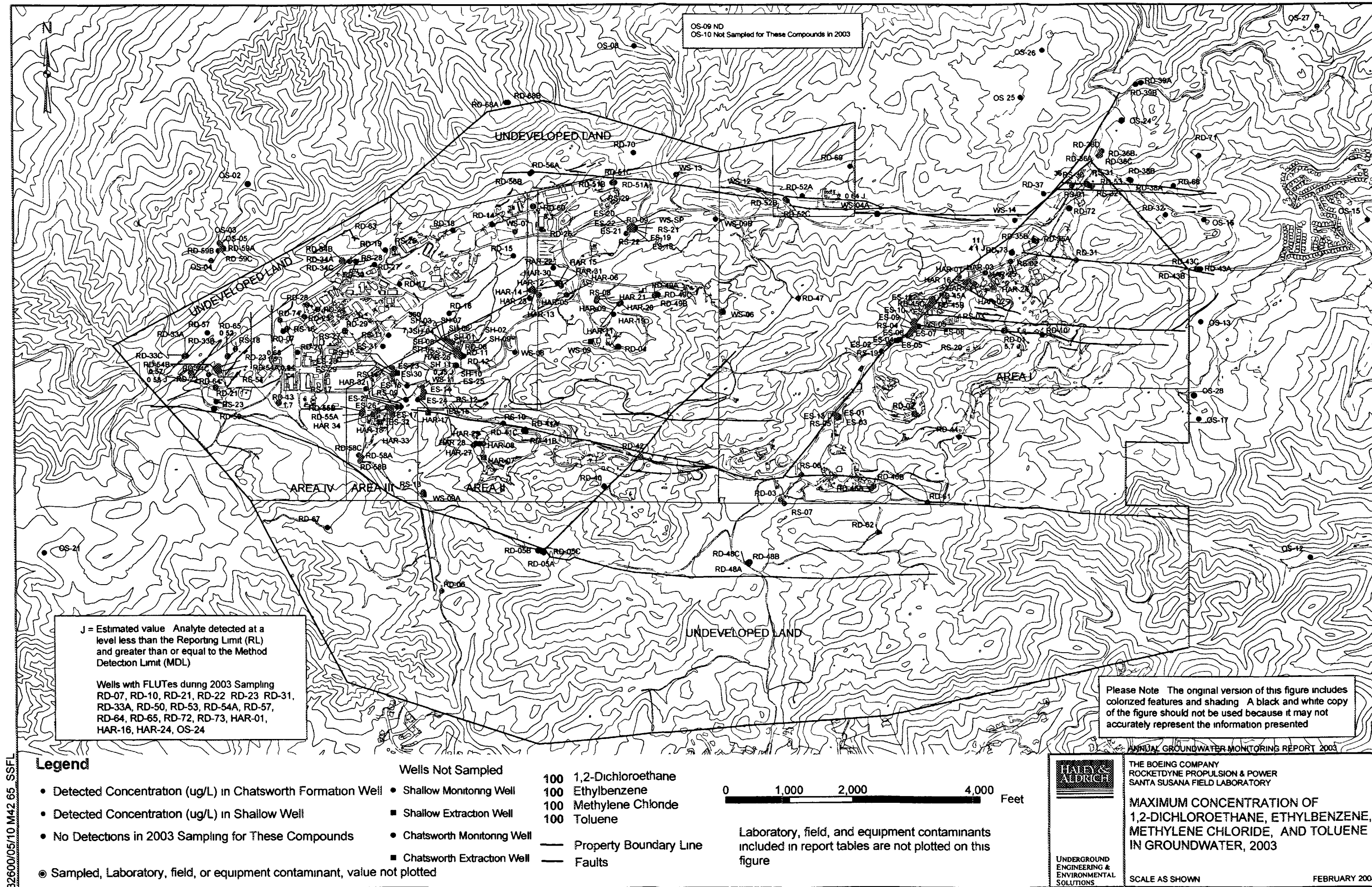
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FIGURE 10

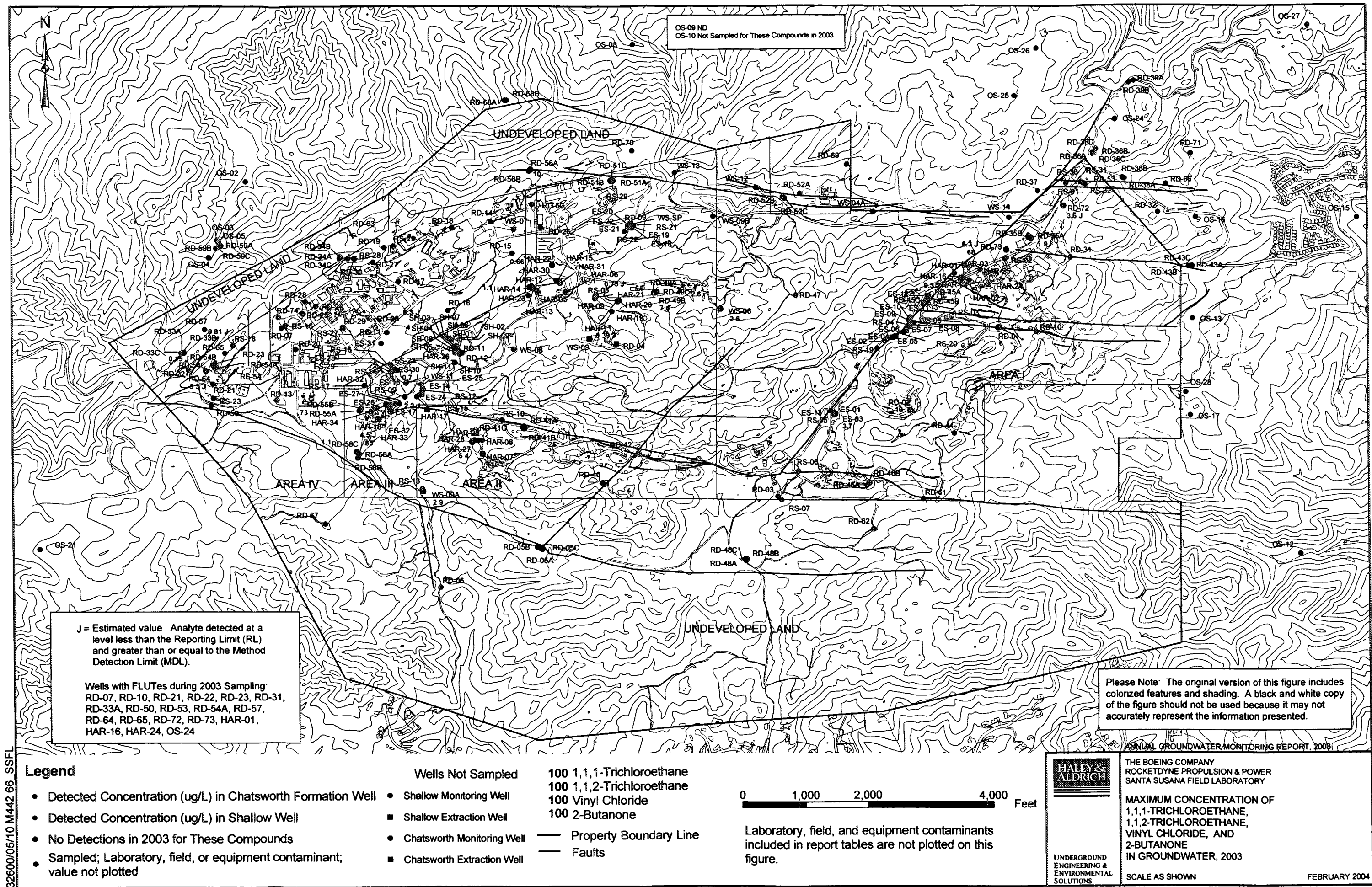


32600/05/10 M42 61 SSFL

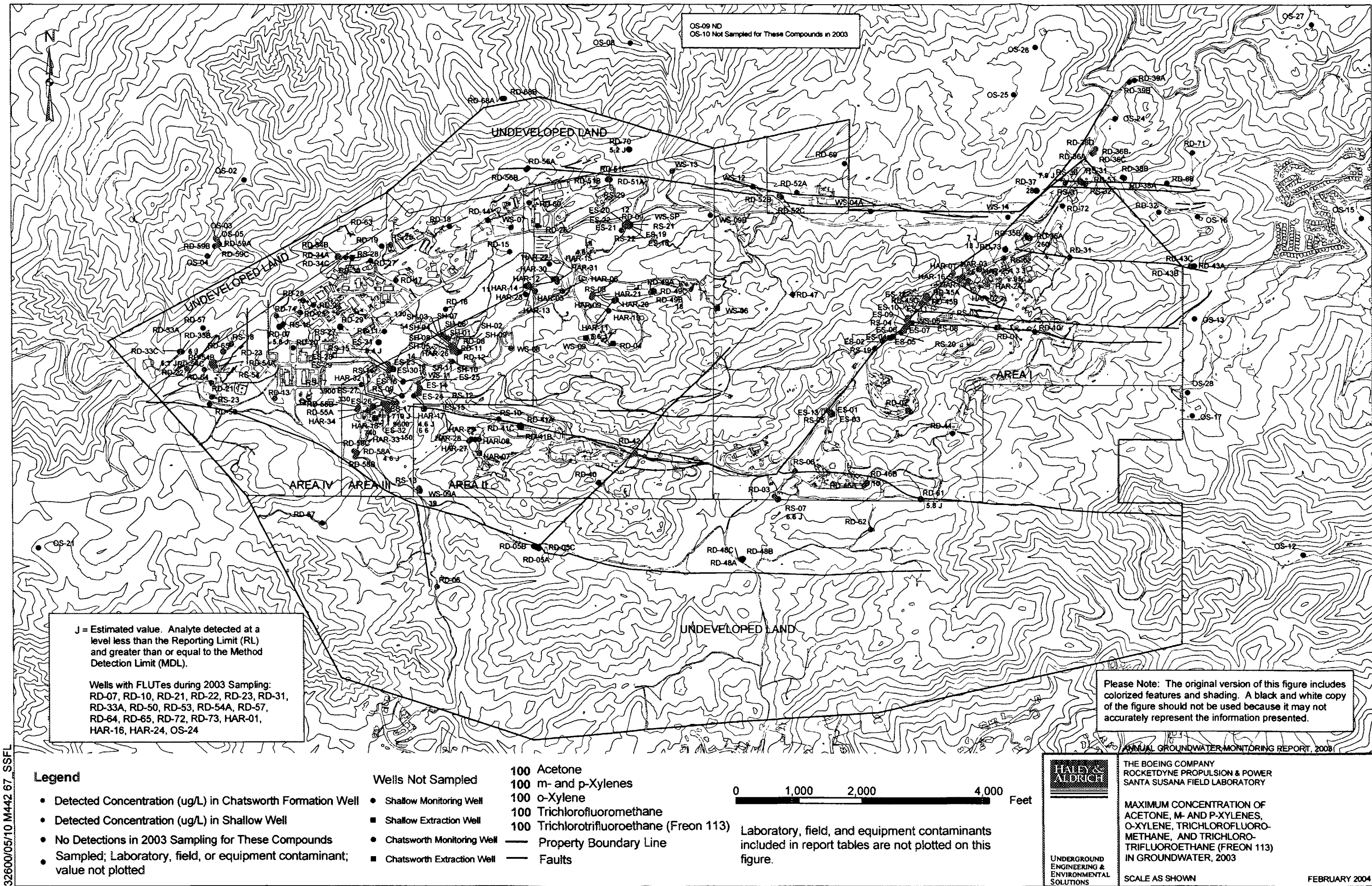




32600/05/10 M42.65 SSFL



32600/05/10 M442 66 SSFL



OS-09 ND
OS-10 Not Sampled for These Compounds in 2003

J = Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).

Wells with FLUTes during 2003 Sampling:
RD-07, RD-10, RD-21, RD-22, RD-23, RD-31, RD-33A, RD-50, RD-53, RD-54A, RD-57, RD-64, RD-65, RD-72, RD-73, HAR-01, HAR-16, HAR-24, OS-24

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MAXIMUM CONCENTRATION OF ACETONE, M- AND P-XYLENES, O-XYLENE, TRICHLOROFLUOROMETHANE, AND TRICHLOROTRIFLUOROETHANE (FREON 113) IN GROUNDWATER, 2003

SCALE AS SHOWN

Legend

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> Detected Concentration (ug/L) in Chatsworth Formation Well Detected Concentration (ug/L) in Shallow Well No Detections in 2003 Sampling for These Compounds Sampled; Laboratory, field, or equipment contaminant; value not plotted | <ul style="list-style-type: none"> Shallow Monitoring Well Shallow Extraction Well Chatsworth Monitoring Well Chatsworth Extraction Well | <ul style="list-style-type: none"> 100 Acetone 100 m- and p-Xylenes 100 o-Xylene 100 Trichlorofluoromethane 100 Trichlorotrifluoroethane (Freon 113) Property Boundary Line Faults |
|--|--|---|

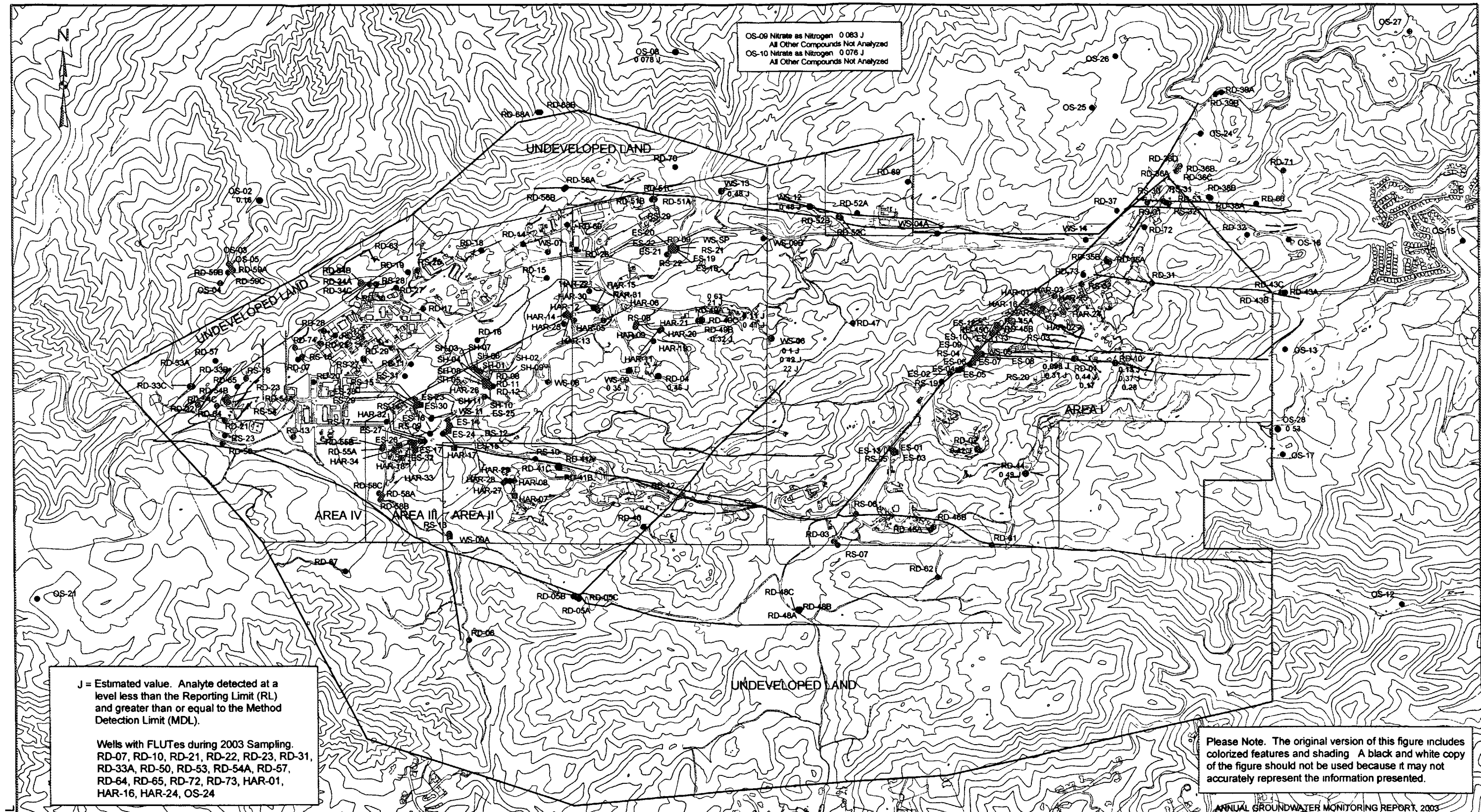
0 1,000 2,000 4,000 Feet

Laboratory, field, and equipment contaminants included in report tables are not plotted on this figure.

32600/05/10 M442 67, SSFL

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FIGURE 17



32600/05/10 M442 68 SSFL

Legend

- Detected Concentration in Chatsworth Formation Well
- No Detections in 2003 Sampling
(Wells RD-52B, RD-52C, RD-59B, RD-59C, RD-51B, RD-51C, RD-68A, RD-68B, WS-04A, WS-09B, OS-03, OS-04, OS-05, OS-09, OS-10, OS-21, and OS-26 were only analyzed for Nitrate as Nitrogen)

Wells Not Sampled

- Shallow Monitoring Well
- Shallow Extraction Well
- Chatsworth Monitoring Well
- Chatsworth Extraction Well

- 100 Ammonia as Nitrogen (mg/L)
- 100 Fluoride (mg/L)
- 100 Formaldehyde (mg/L)
- 100 Nitrate as Nitrogen (mg/L)

- Property Boundary Line
- Faults

0 1,000 2,000 4,000 Feet

Laboratory, field, and equipment contaminants included in report tables are not plotted on this figure.



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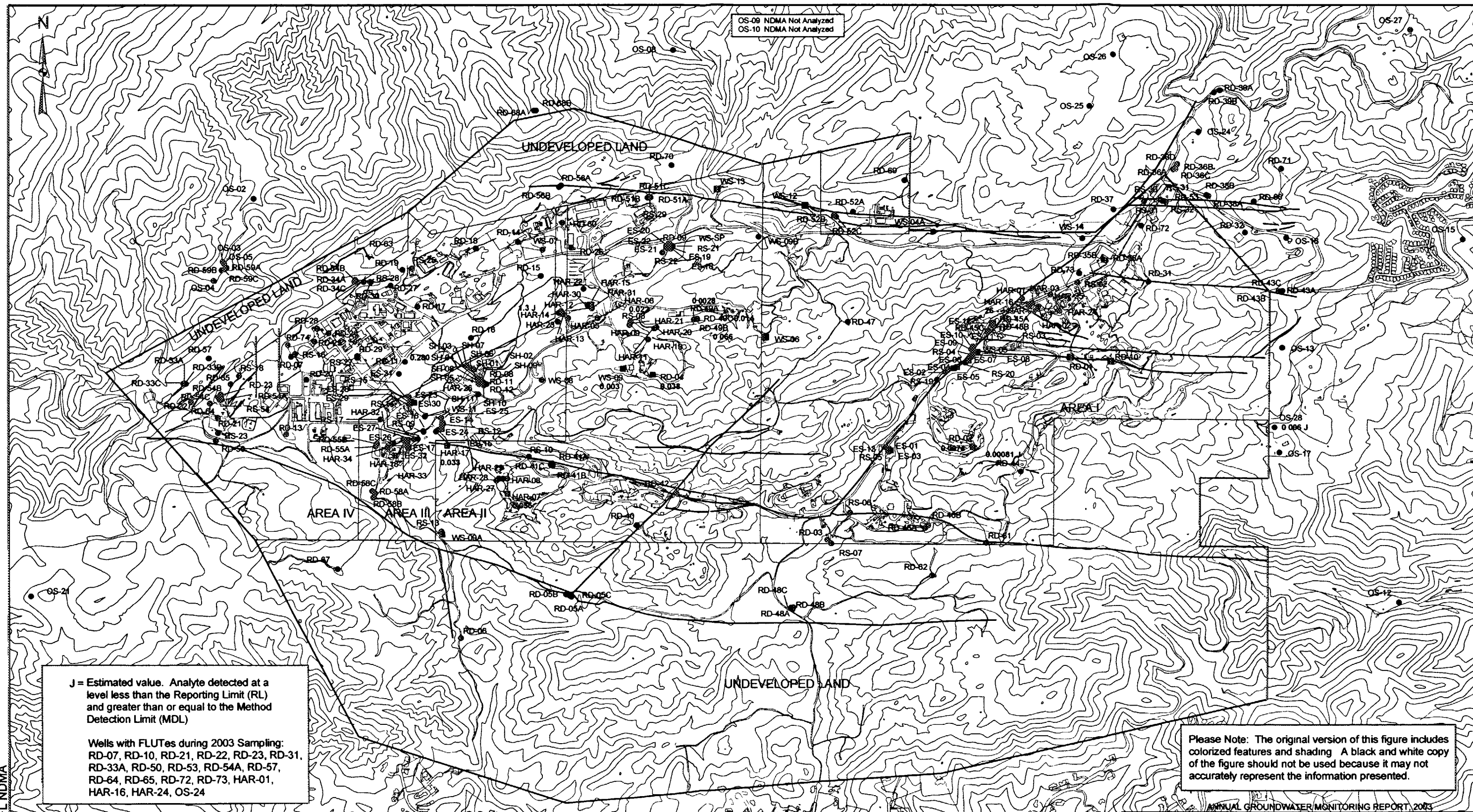
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SANTA SUSANA FIELD LABORATORY

MAXIMUM CONCENTRATION OF AMMONIA
AS NITROGEN, FLUORIDE, FORMALDEHYDE,
AND NITRATE AS NITROGEN
IN GROUNDWATER, 2003

SCALE AS SHOWN

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FIGURE 18



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MAXIMUM CONCENTRATION OF
N-NITROSODIMETHYLAMINE
IN GROUNDWATER, 2003

SCALE AS SHOWN

FEBRUARY 2004

32600/05/10 52 SSFL App IX M442

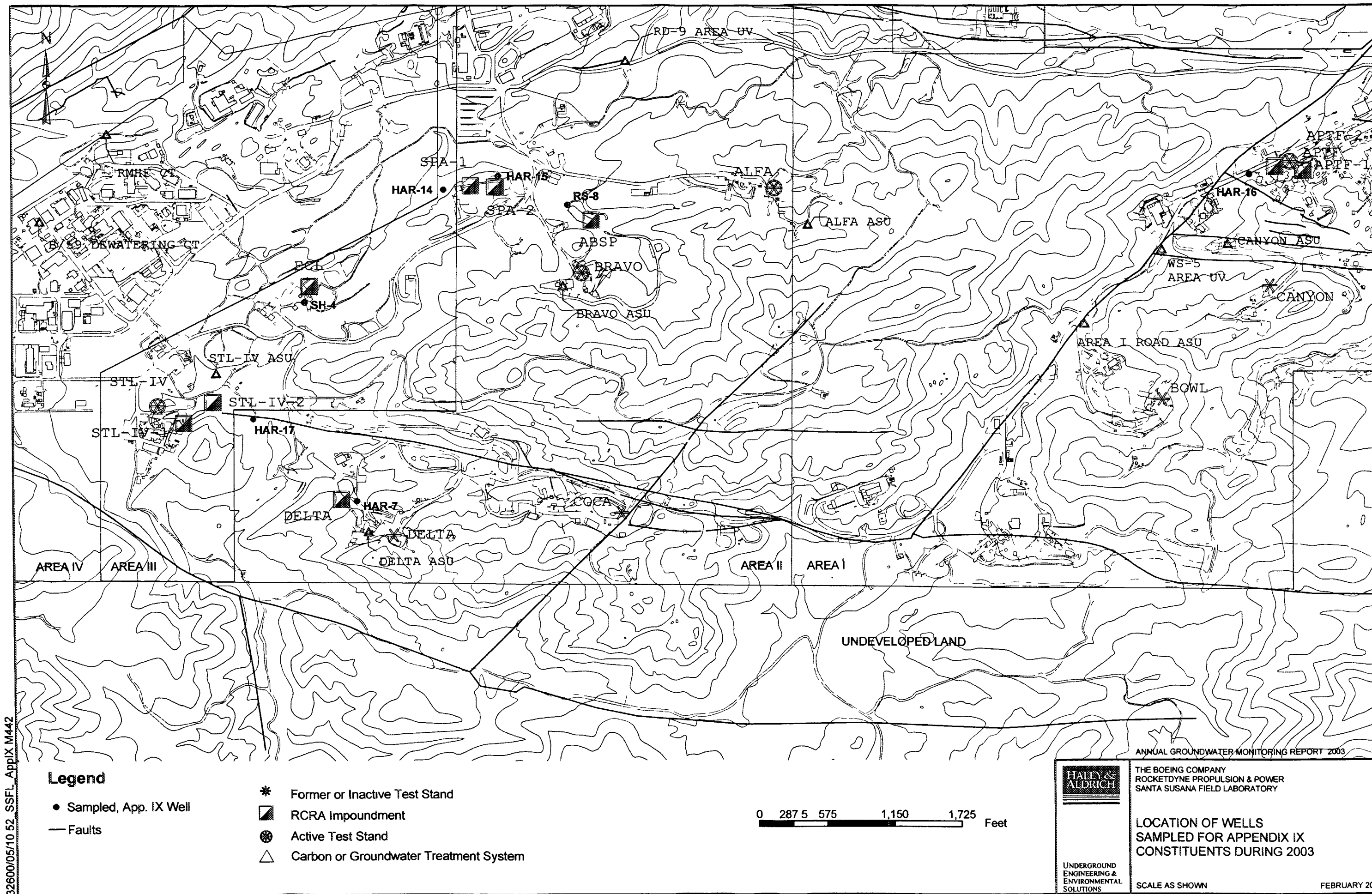
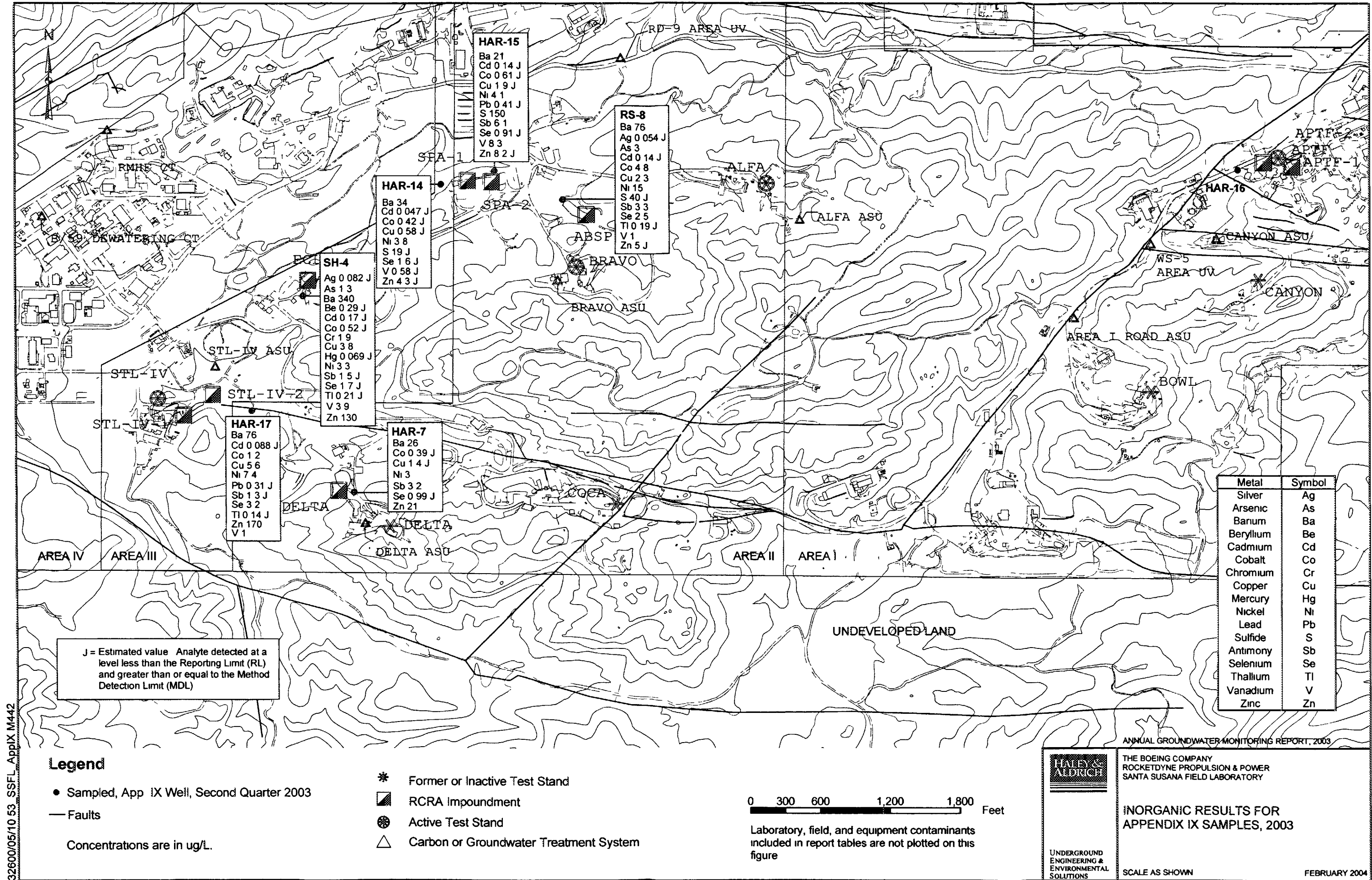


FIGURE 20

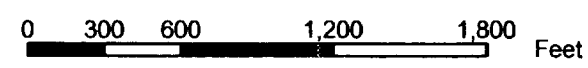


J = Estimated value Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL)

Metal	Symbol
Silver	Ag
Arsenic	As
Barium	Ba
Beryllium	Be
Cadmium	Cd
Cobalt	Co
Chromium	Cr
Copper	Cu
Mercury	Hg
Nickel	Ni
Lead	Pb
Sulfide	S
Antimony	Sb
Selenium	Se
Thallium	Tl
Vanadium	V
Zinc	Zn

Legend

- Sampled, App IX Well, Second Quarter 2003
- Faults
- Concentrations are in ug/L.
- * Former or Inactive Test Stand
- ▨ RCRA Impoundment
- ⊗ Active Test Stand
- △ Carbon or Groundwater Treatment System



Laboratory, field, and equipment contaminants included in report tables are not plotted on this figure



ANNUAL GROUNDWATER MONITORING REPORT, 2003

THE BOEING COMPANY
ROCKETDYNE PROPULSION & POWER
SANTA SUSANA FIELD LABORATORY

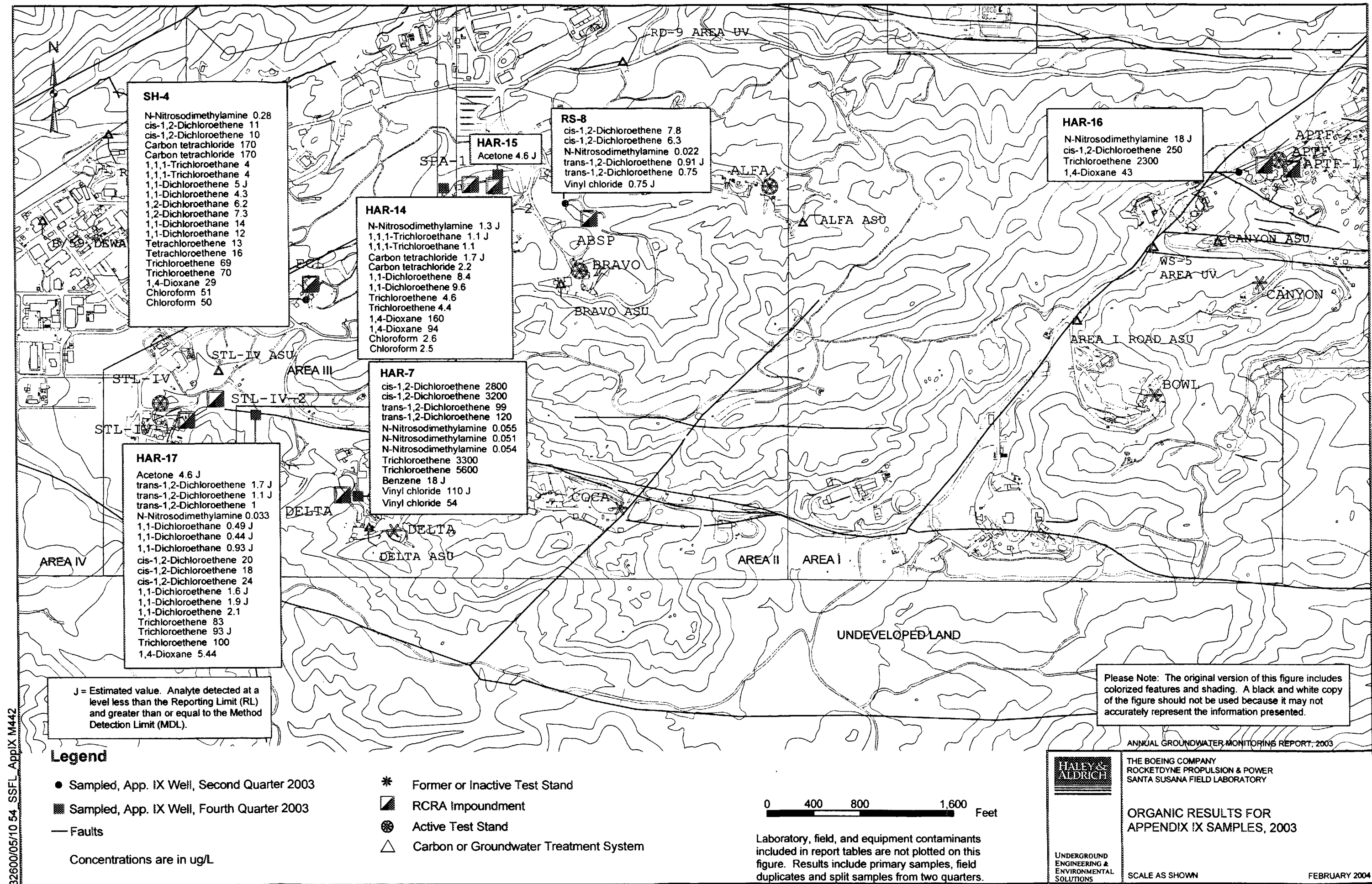
INORGANIC RESULTS FOR
APPENDIX IX SAMPLES, 2003

SCALE AS SHOWN

FEBRUARY 2004

FIGURE 21

32600/05/10 53 SSFL AppIX M442



APPENDIX A
Water Level Hydrographs

APPENDIX A
WATER LEVEL HYDROGRAPHS

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Figures

Water Level Hydrographs A-1 through A-234

FLUTe System Hydrographs A-235 through A-251

LIST OF HYDROGRAPHS

Shallow Wells

Figure	Well Identifier
A-1 through A-11	SH-01 through SH-11
A-12 through A-36	RS-01 through RS-25
A-37 through A-43	RS-27 through RS-32, and RS-54
A-44 through A-75	ES-01 through ES-32
A-76 through A-79	HAR-02 through HAR-04, and HAR-09
A-80 through A-84	HAR-11 through HAR-15
A-85 through A-92	HAR-27 through HAR-34

Chatsworth Formation Wells

Figure	Well Identifier
A-93 through A-96	RD-01 through RD-04
A-97 through A-99	RD-05A, RD-05B, RD-05C
A-100 through A-126	RD-06 through RD-32
A-127 through A-129	RD-33A, RD-33B, RD-33C
A-130 through A-132	RD-34A, RD-34B, RD-34C
A-133 through A-134	RD-35A, RD-35B
A-135 through A-139	RD-36A, RD-36B, RD-36C, RD-36D, and RD-37
A-140 through A-141	RD-38A, RD-38B
A-142 through A-144	RD-39A, RD-39B, and RD-40
A-145 through A-148	RD-41A, RD-41B, RD-41C, and RD-42
A-149 through A-152	RD-43A, RD-43B, RD-43C, and RD-44
A-153 through A-155	RD-45A, RD-45B, RD-45C
A-156 through A-158	RD-46A, RD-46B, and RD-47
A-159 through A-161	RD-48A, RD-48B, RD-48C
A-162 through A-165	RD-49A, RD-49B, RD-49C, and RD-50
A-166 through A-168	RD-51A, RD-51B, RD-51C
A-169 through A-172	RD-52A, RD-52B, RD-52C, and RD-53
A-173 through A-175	RD-54A, RD-54B, RD-54C
A-176 through A-177	RD-55A, RD-55B
A-178 through A-180	RD-56A, RD-56B, and RD-57
A-181 through A-183	RD-58A, RD-58B, RD-58C
A-184 through A-186	RD-59A, RD-59B, RD-59C
A-187 through A-194	RD-60 through RD-67

LIST OF HYDROGRAPHS

Chatsworth Formation Wells - continued

Figure	Well Identifier
A-195 through A-186	RD-68A, RD-68B
A-197 through A-202	RD-69 through RD-74
A-203 through A-207	HAR-01, and HAR-05 through HAR-08
A-208 through A-218	HAR-16 through HAR-26
A-219 through A-223	WS-04A through WS-08
A-224 through A-226	WS-09, WS-09A, WS-09B
A-227 through A-231	WS-11 through WS-14, and WS-SP
A-232 through A-234	OS-24 through OS-26

FLUTe System Hydrographs

Figure	Well Identifier
A-235	RD-10
A-236	RD-21
A-237	RD-22
A-238	RD-23
A-239	RD-31
A-240	RD-33A
A-241	RD-50
A-242	RD-53
A-243	RD-54A
A-244	RD-57
A-245	RD-64
A-246	RD-65
A-247	RD-72
A-248	RD-73
A-249	HAR-01
A-250	HAR-16
A-251	HAR-24

Note: FLUTe system hydrographs were not available for well RD-07 because the transducer was inoperable during 2003 and from OS-24 because a datalogger is not installed at the well.

TABLE A-I

**CONSTRUCTION DETAILS OF DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA**

Page 1 of 6

Well	RD-07		RD-10		RD-21		RD-22	
Date Liner Installed	04/29/02		03/18/02		01/14/03		02/18/03	
Date Liner Removed	NA		NA		NA		NA	
Top of Casing Elevation (ft msl)	1812.82		1904.43		1866.96		1853.41	
Open-hole Depth to Water (ft btc)	87.03		195		90.3		305	
Hole Total Depth (ft btc)	299.55		401		175.3		440	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	50 - 60	1757.82	171 - 181	1728.43	85-95	1776.96	310-320	1538.41
Port 2	70 - 80	1737.82	191 - 201	1708.43	105-115	1756.96	330-340	1518.41
Port 3	90 - 100	1717.82	211 - 221	1688.43	125-135	1736.96	350-360	1498.41
Port 4	110 - 120	1697.82	231 - 241	1668.43	145-155	1716.96	370-380	1478.41
Port 5	130 - 140	1677.82	251 - 261	1648.43	165-175	1696.96	390-400	1458.41
Port 6	150 - 160	1657.82	271 - 281	1628.43	--	--	410-420	1438.41
Port 7	170 - 180	1637.82	291 - 301	1608.43	--	--	430-440	1418.41
Port 8	190 - 200	1617.82	311 - 321	1588.43	--	--	--	--
Port 9	210 - 220	1597.82	331 - 341	1568.43	--	--	--	--
Port 10	230 - 240	1577.82	351 - 361	1548.43	--	--	--	--
Port 11	250 - 260	1557.82	371 - 381	1528.43	--	--	--	--
Port 12	270 - 280	1537.82	391 - 401	1508.43	--	--	--	--
Port 13	290 - 300	1517.82	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of Table A-I for footnotes and explanations.

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TABLE A-I**CONSTRUCTION DETAILS OF DISCRETE-INTERVAL MONITORING SYSTEMS****BOEING SANTA SUSANA FIELD LABORATORY****VENTURA COUNTY, CALIFORNIA**

Page 2 of 6

Well	RD-23		RD-31		RD-33A		RD-50	
Date Liner Installed	01/20/03		01/25/01		01/09/03		01/15/03	
Date Liner Removed	NA		NA		NA		NA	
Top of Casing Elevation (ft msl)	1838.19		1945.02		1792.97		1914.88	
Open-hole Depth to Water (ft btc)	236.15		116.32		211.58		113.31	
Hole Total Depth (ft btc)	443.2		178.5		321.75		195.3	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	231-241	1602.19	48 - 58	1892.02	211 - 221	1576.97	106-116	1803.88
Port 2	251-261	1582.19	68 - 78	1872.02	231 - 241	1556.97	126-136	1783.88
Port 3	271-281	1562.19	88 - 98	1852.02	251 - 261	1536.97	146-156	1763.88
Port 4	291-301	1542.19	108 - 118	1832.02	271 - 281	1516.97	166-176	1743.88
Port 5	311-321	1522.19	128 - 138	1812.02	291 - 301	1496.97	186-196	1723.88
Port 6	331-341	1502.19	148 - 158	1792.02	311 - 321	1476.97	--	--
Port 7	351-361	1482.19	168 - 178	1772.02	--	--	--	--
Port 8	371-381	1462.19	--	--	--	--	--	--
Port 9	391-396	1444.69	--	--	--	--	--	--
Port 10	--	--	--	--	--	--	--	--
Port 11	--	--	--	--	--	--	--	--
Port 12	--	--	--	--	--	--	--	--
Port 13	--	--	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of Table A-I for footnotes and explanations.

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TABLE A-I

**CONSTRUCTION DETAILS OF DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA**

Page 3 of 6

Well	RD-53		RD-54A		RD-57		RD-64	
Date Liner Installed	01/23/01		01/07/03		09/11/02		04/17/02	
Date Liner Removed	NA		NA		NA		NA	
Top of Casing Elevation (ft msl)	1909.19		1841.72		1774.15		1857.04	
Open-hole Depth to Water (ft btc)	128.5		160.2		352.5		231.82	
Hole Total Depth (ft btc)	161		283.8		418.3		403.0	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	74 - 79	1832.69	150.5 - 160.5	1686.22	228 - 238	1541.15	170.5 - 180.5	1681.54
Port 2	84 - 89	1822.69	170.5 - 180.5	1666.22	248 - 258	1521.15	190.5 - 200.5	1661.54
Port 3	94 - 99	1812.69	190.5 - 200.5	1646.22	268 - 278	1501.15	210.5 - 220.5	1641.54
Port 4	104 - 109	1802.69	210.5 - 220.5	1626.22	288 - 298	1481.15	230.5 - 240.5	1621.54
Port 5	114 - 119	1792.69	230.5 - 240.5	1606.22	308 - 318	1461.15	250.5 - 260.5	1601.54
Port 6	124 - 129	1782.69	250.5 - 260.5	1586.22	328 - 338	1441.15	270.5 - 280.5	1581.54
Port 7	134 - 139	1772.69	270.5 - 280.5	1566.22	348 - 358	1421.15	290.5 - 300.5	1561.54
Port 8	144 - 149	1762.69	--	--	368 - 378	1401.15	310.5 - 320.5	1541.54
Port 9	154 - 159	1752.69	--	--	388 - 398	1381.15	330.5 - 340.5	1521.54
Port 10	--	--	--	--	408 - 418	1361.15	350.5 - 360.5	1501.54
Port 11	--	--	--	--	--	--	370.5 - 380.5	1481.54
Port 12	--	--	--	--	--	--	390.5 - 400.5	1461.54
Port 13	--	--	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of Table A-I for footnotes and explanations.

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TABLE A-I
CONSTRUCTION DETAILS OF DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	RD-65		RD-72		RD-73		HAR-01	
Date Liner Installed	10/29/02		04/02/01		02/02/01		03/08/01	
Date Liner Removed	NA		NA		NA		NA	
Top of Casing Elevation (ft msl)	1819.14		1907.25		1901.60		1874.13	
Open-hole Depth to Water (ft btc)	227		78.82		70.08		48.31	
Hole Total Depth (ft btc)	397		184		140		108	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	168.5-178.5	1645.64	45 - 55	1857.25	27 - 32	1872.1	13 - 18	1858.63
Port 2	188.5-198.5	1625.64	65 - 75	1837.25	37 - 42	1862.1	23 - 28	1848.63
Port 3	208.5-218.5	1605.64	85 - 95	1817.25	47 - 52	1852.1	33 - 38	1838.63
Port 4	228.5-238.5	1585.64	105 - 115	1797.25	57 - 62	1842.1	43 - 48	1828.63
Port 5	248.5-258.5	1565.64	125 - 135	1777.25	67 - 72	1832.1	53 - 58	1818.63
Port 6	268.5-278.5	1545.64	145 - 155	1757.25	77 - 82	1822.1	63 - 68	1808.63
Port 7	288.5-298.5	1525.64	165 - 175	1737.25	87 - 92	1812.1	73 - 78	1798.63
Port 8	308.5-318.5	1505.64	185 - 195	1717.25	97 - 102	1802.1	83 - 88	1788.63
Port 9	328.5-338.5	1485.64	--	--	107 - 112	1792.1	93 - 98	1778.63
Port 10	348.5-358.5	1465.64	--	--	117 - 122	1782.1	103 - 108	1768.63
Port 11	368.5-378.5	1445.64	--	--	127 - 132	1772.1	--	--
Port 12	388.5-398.5	1425.64	--	--	137 - 140	1762.1	--	--
Port 13	--	--	--	--	--	--	--	--
Port 14	--	--	--	--	--	--	--	--
Port 15	--	--	--	--	--	--	--	--

See last page of Table A-I for footnotes and explanations.

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TABLE A-I
CONSTRUCTION DETAILS OF DISCRETE-INTERVAL MONITORING SYSTEMS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well	HAR-16		HAR-24		OS-24	
Date Liner Installed	06/19/01		04/06/01		07/09/01	
Date Liner Removed	NA		NA		NA	
Top of Casing Elevation (ft msl)	1872.31		1906.89		1947.30	
Open-hole Depth to Water (ft btc)	Unknown		75.3		285	
Hole Total Depth (ft btc)	114		112.5		513	
	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)	Depth of Open Interval (ft btc)	Midpoint Monitoring Elevation (ft msl)
Port 1	0 - 4	1870.31	37 - 42	1867.39	223 - 233	1719.3
Port 2	9 - 14	1860.81	47 - 52	1857.39	243 - 253	1699.3
Port 3	19 - 24	1850.81	57 - 62	1847.39	263 - 273	1679.3
Port 4	29 - 34	1840.81	67 - 72	1837.39	283 - 293	1659.3
Port 5	39 - 44	1830.81	77 - 82	1827.39	303 - 313	1639.3
Port 6	49 - 54	1820.81	87 - 92	1817.39	323 - 333	1619.3
Port 7	59 - 64	1810.81	97 - 102	1807.39	343 - 353	1599.3
Port 8	69 - 74	1800.81	107 - 112	1797.39	363 - 373	1579.3
Port 9	79 - 84	1790.81	--	--	383 - 393	1559.3
Port 10	89 - 94	1780.81	--	--	403 - 413	1539.3
Port 11	99 - 104	1770.81	--	--	423 - 433	1519.3
Port 12	109 - 114	1760.81	--	--	443 - 453	1499.3
Port 13	--	--	--	--	463 - 473	1479.3
Port 14	--	--	--	--	483 - 493	1459.3
Port 15	--	--	--	--	503 - 513	1439.3

See last page of Table A-I for footnotes and explanations.

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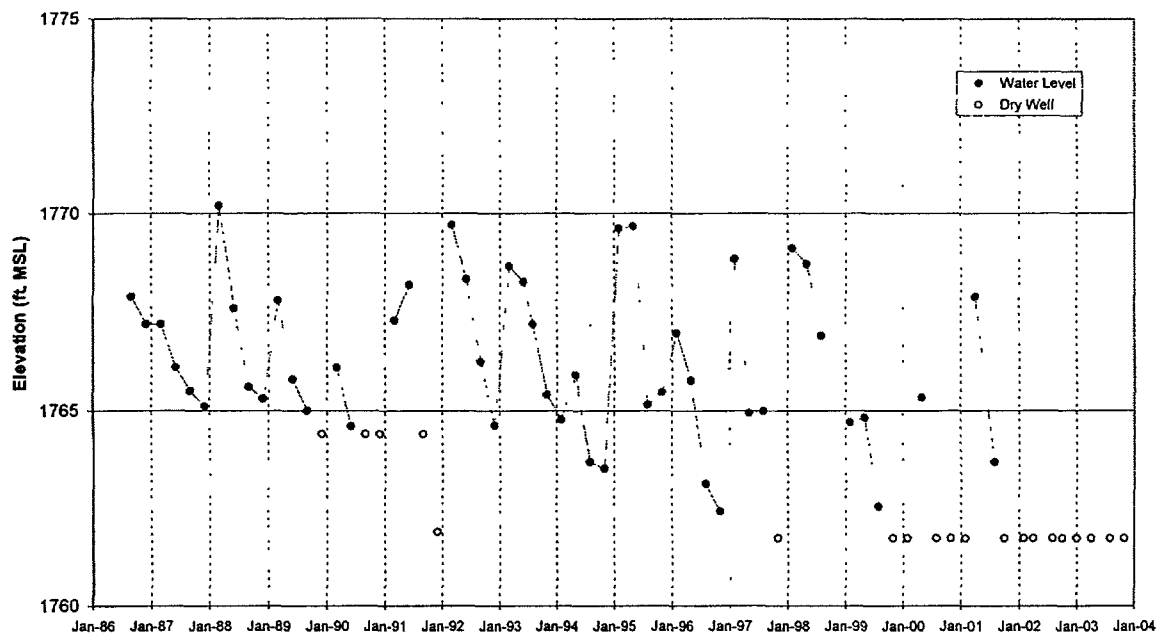
27-February-2004

TABLE A-I
FOOTNOTES AND EXPLANATIONS

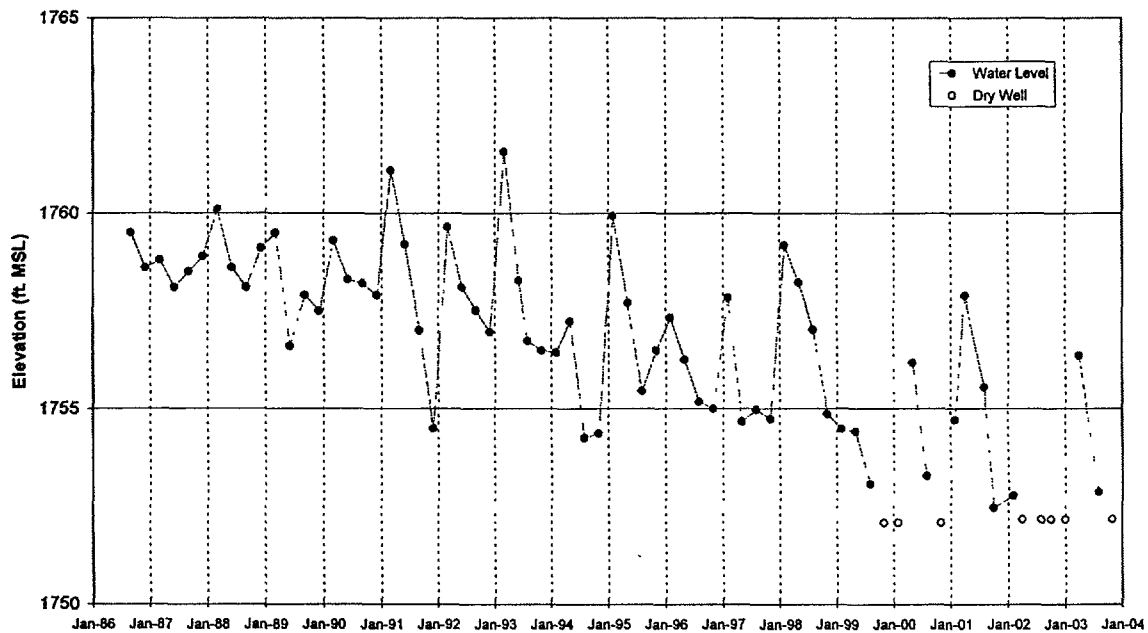
ft btc	=	Feet below top of casing.
ft msl	=	Feet above mean sea level.
NA	=	Not applicable
--	=	No FLUTe port installed.

HAR-01, HAR-16, HAR-24, RD-53, and RD-73 have alternating open and blank intervals at 5-foot frequencies (i.e., 5 feet open then 5 feet closed).

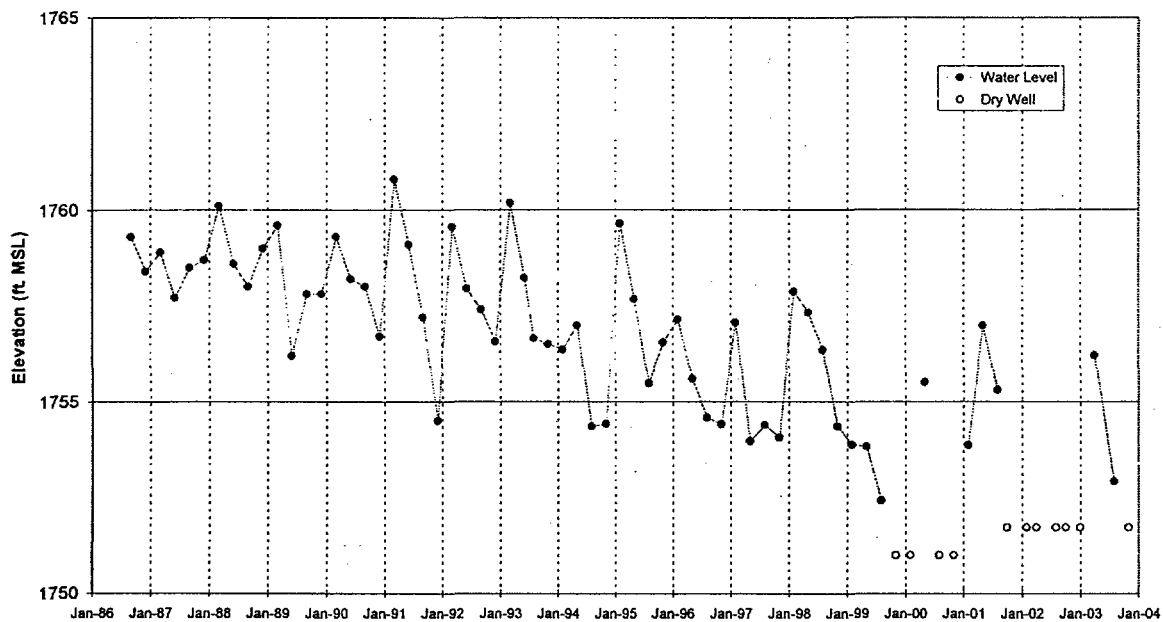
RD-07, RD-10, RD-21, RD-22, RD-23, RD-31, RD-33A, RD-50, RD-54A, RD-57, RD-64, RD-65, RD-72, and OS-24 have alternating open and blank intervals at 10-foot frequencies (i.e., 10 feet open then 10 feet closed).



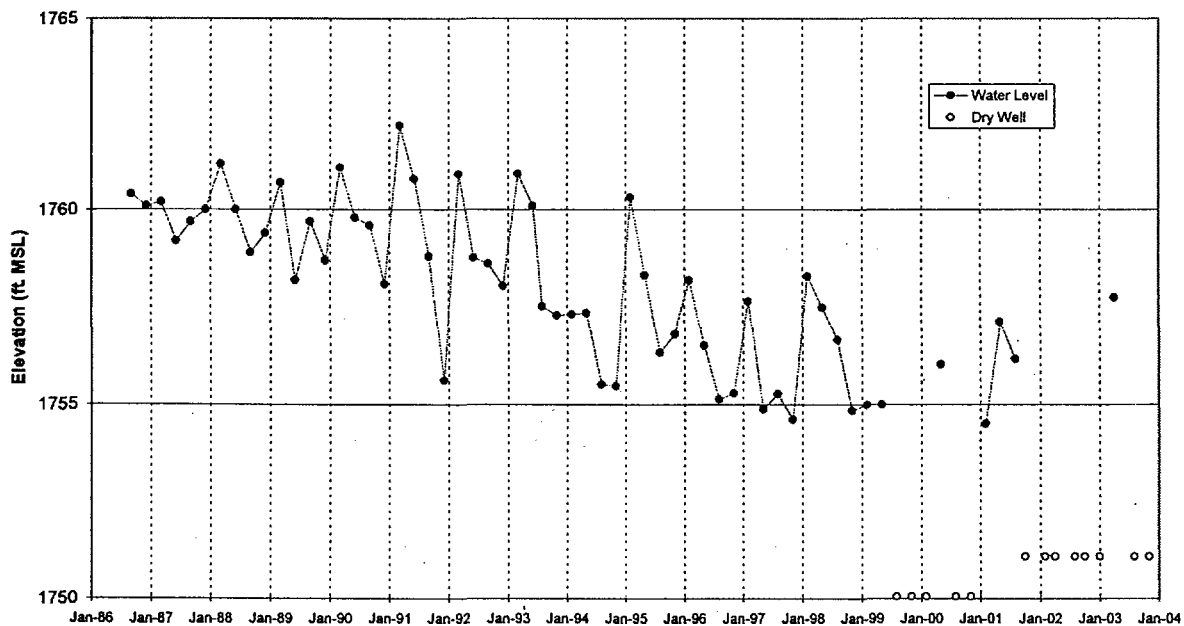
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-1
Figure A-1



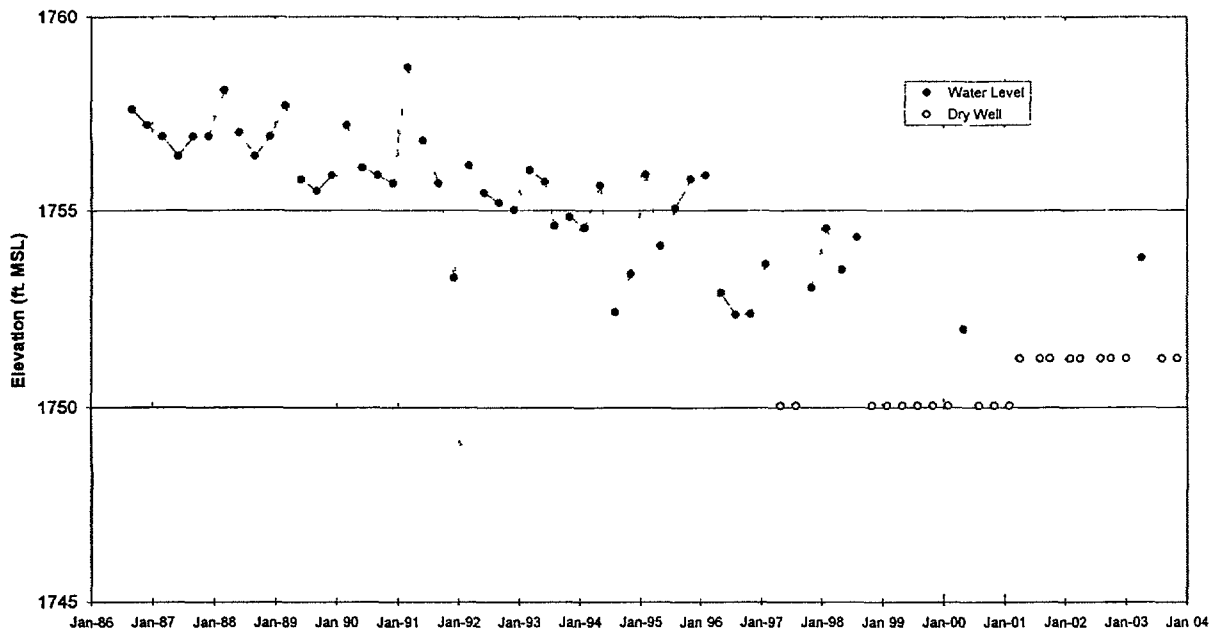
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-2
Figure A-2



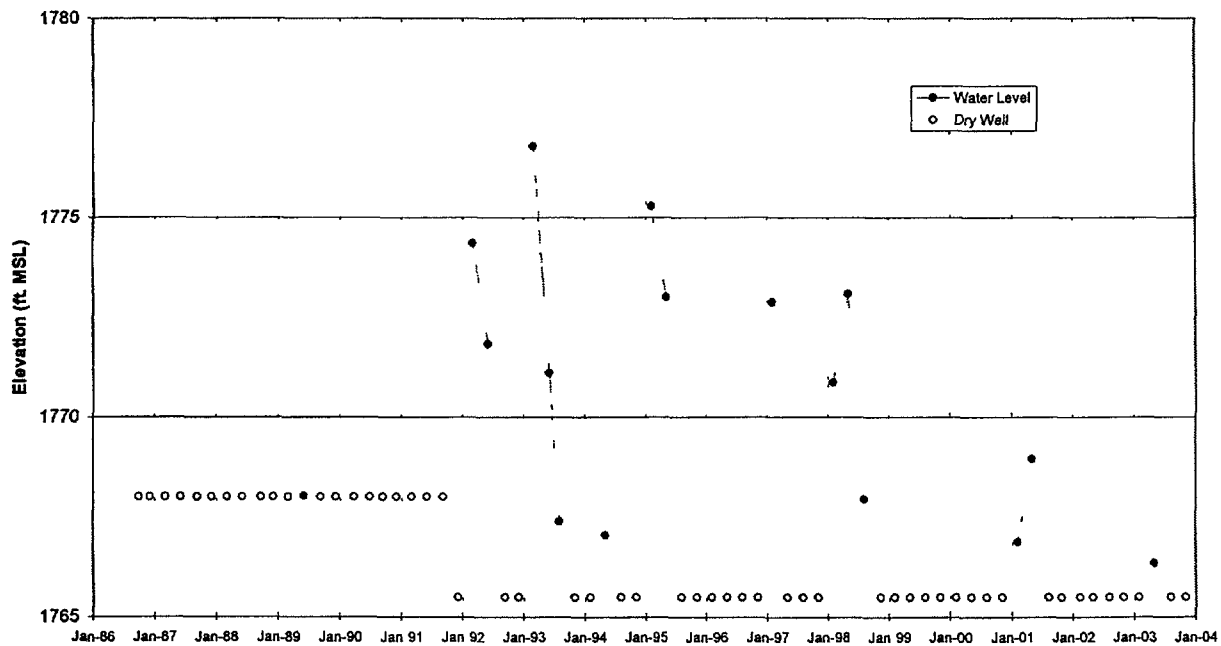
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-3
Figure A-3



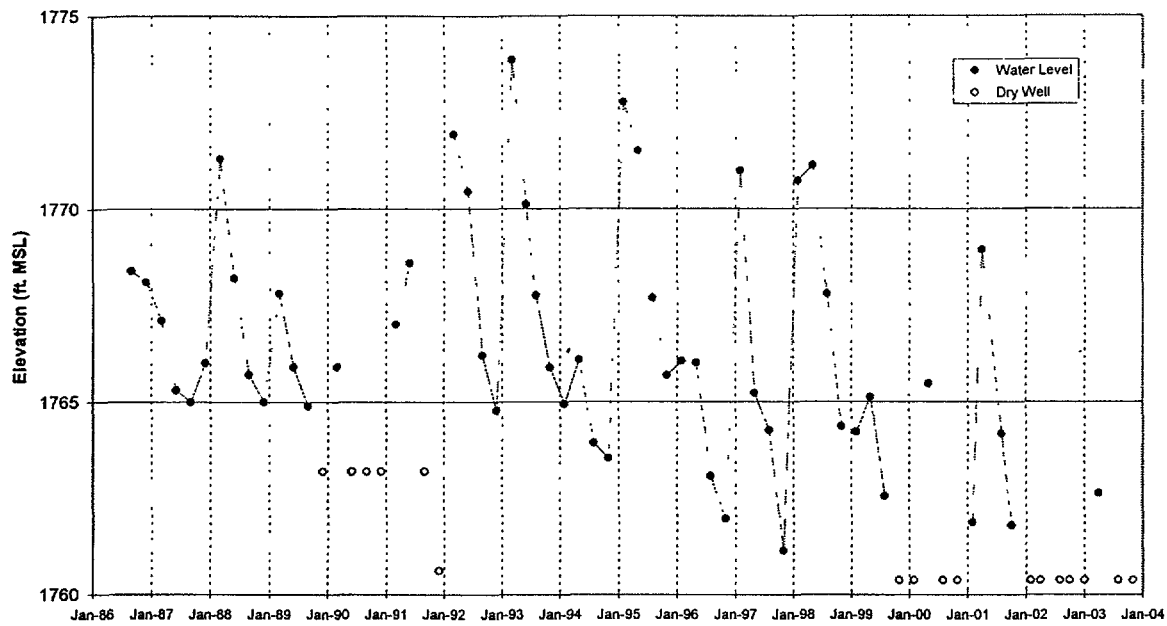
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-4
Figure A-4



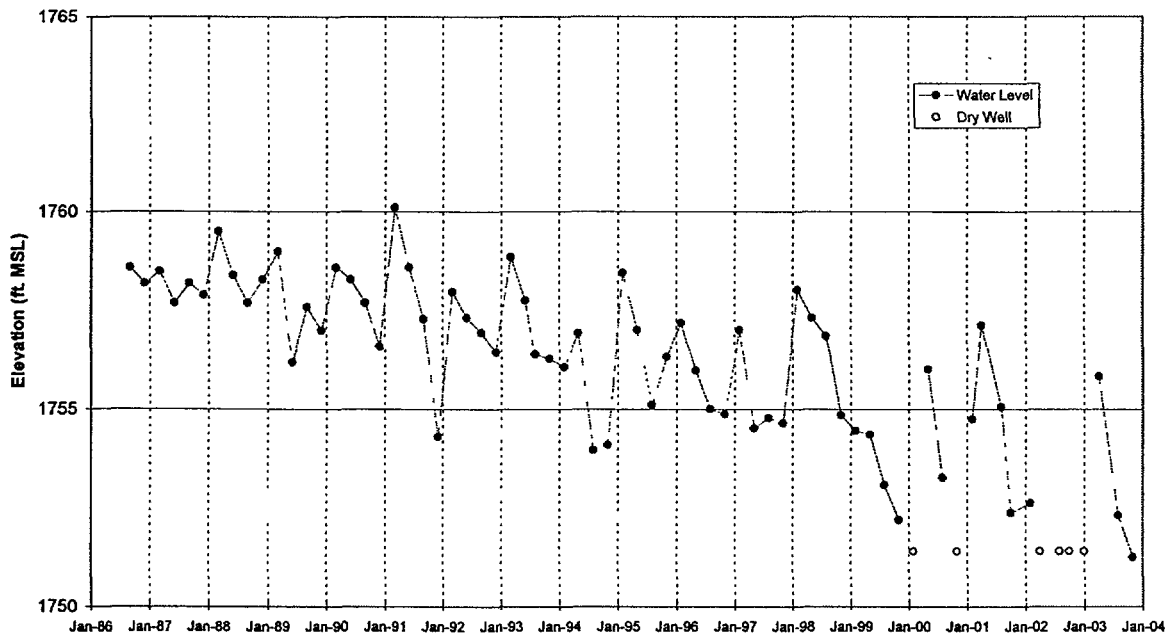
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-5
Figure A-5



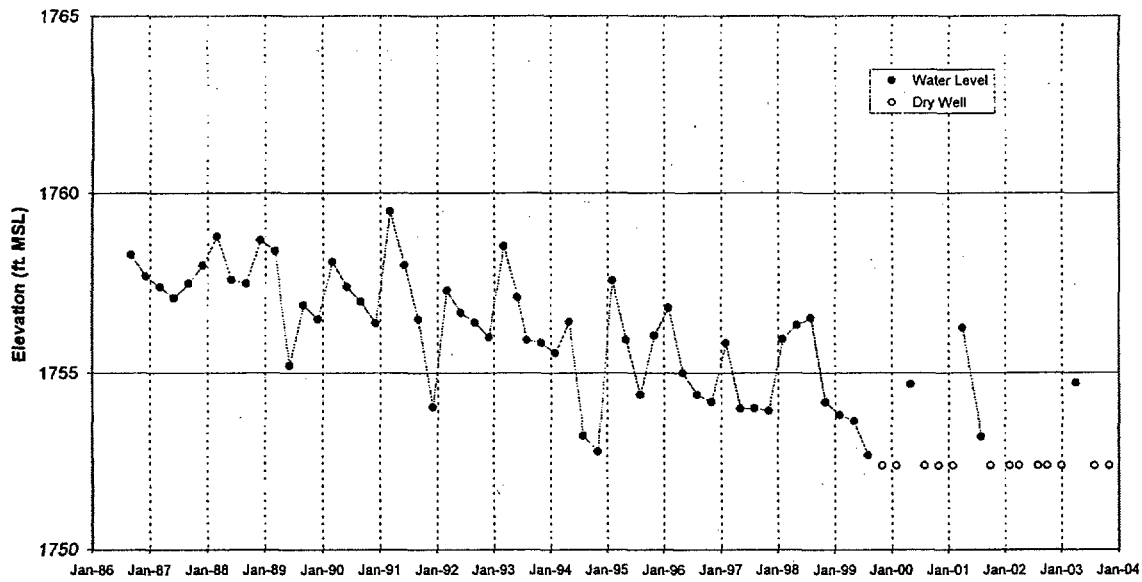
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-6
Figure A-6



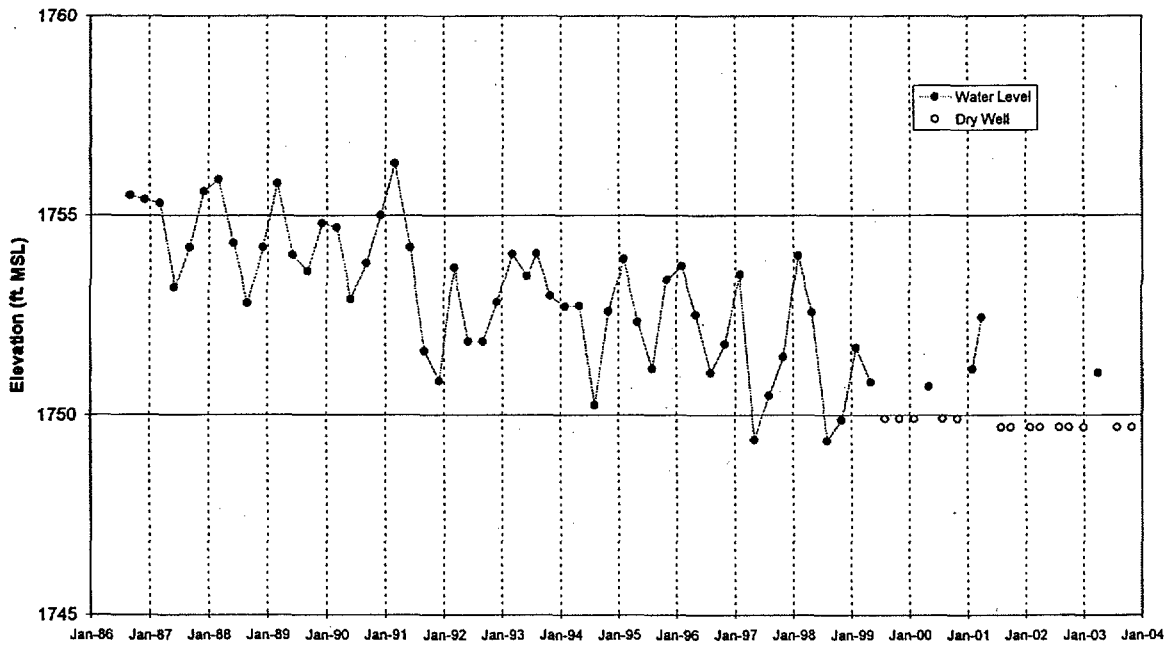
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-7
Figure A-7



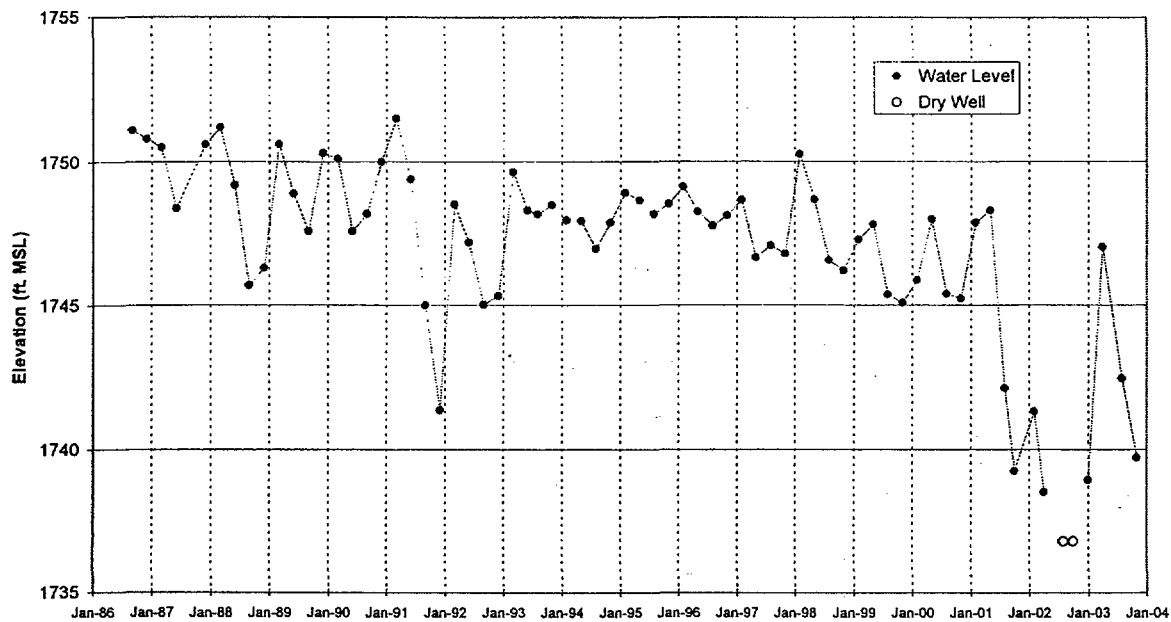
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-8
Figure A-8



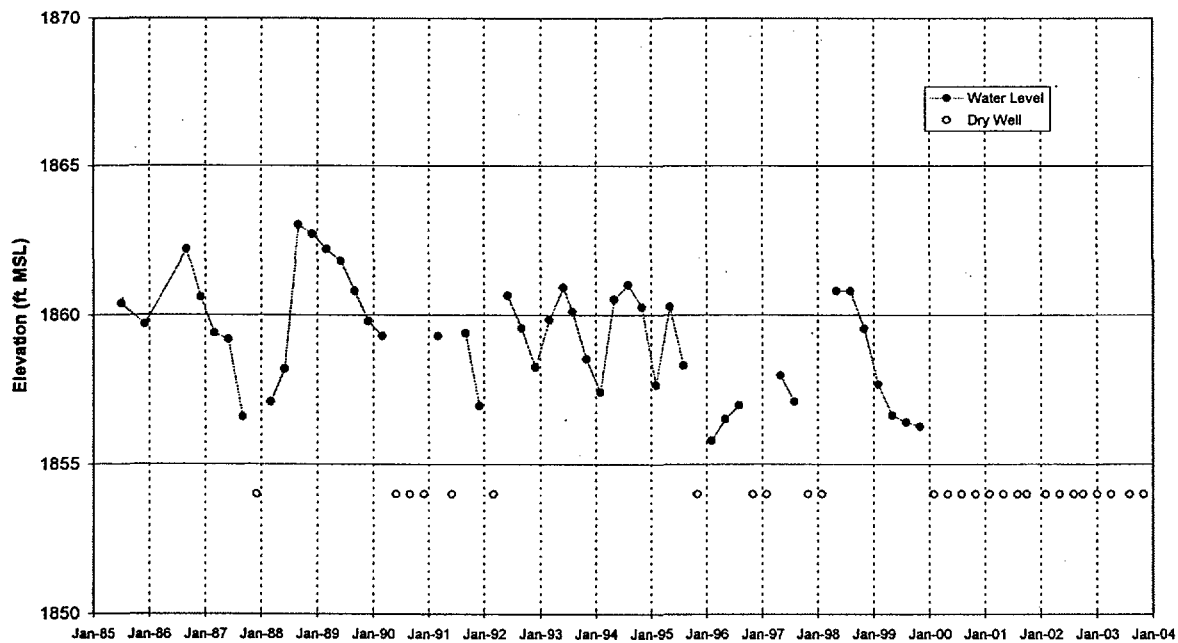
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-9
Figure A-9



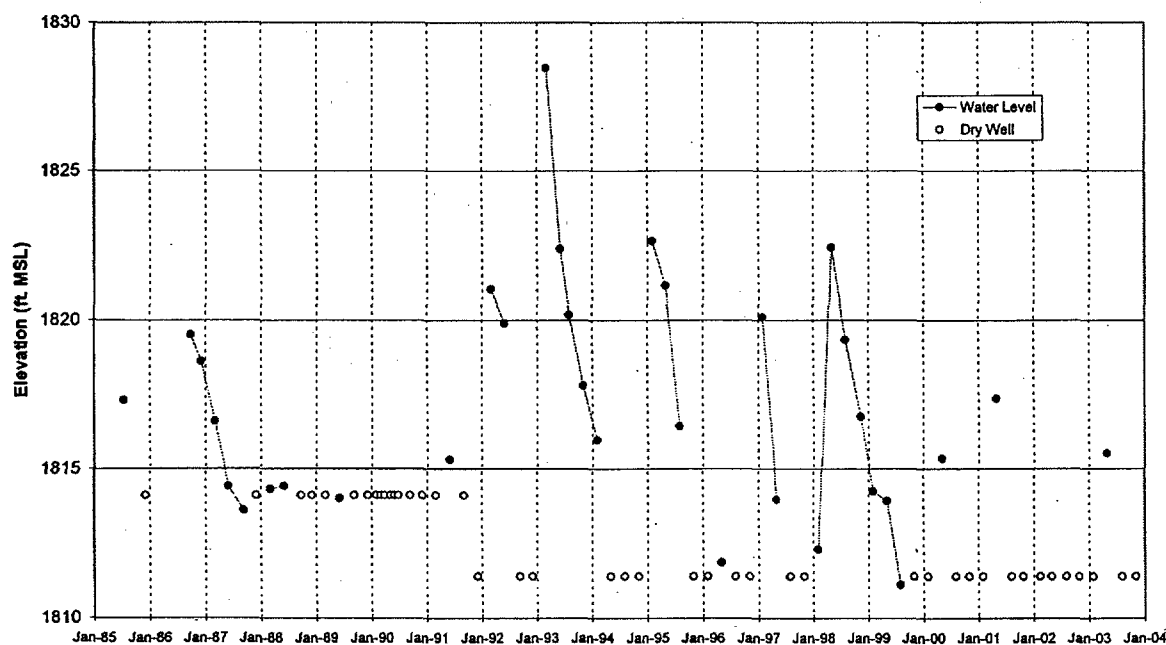
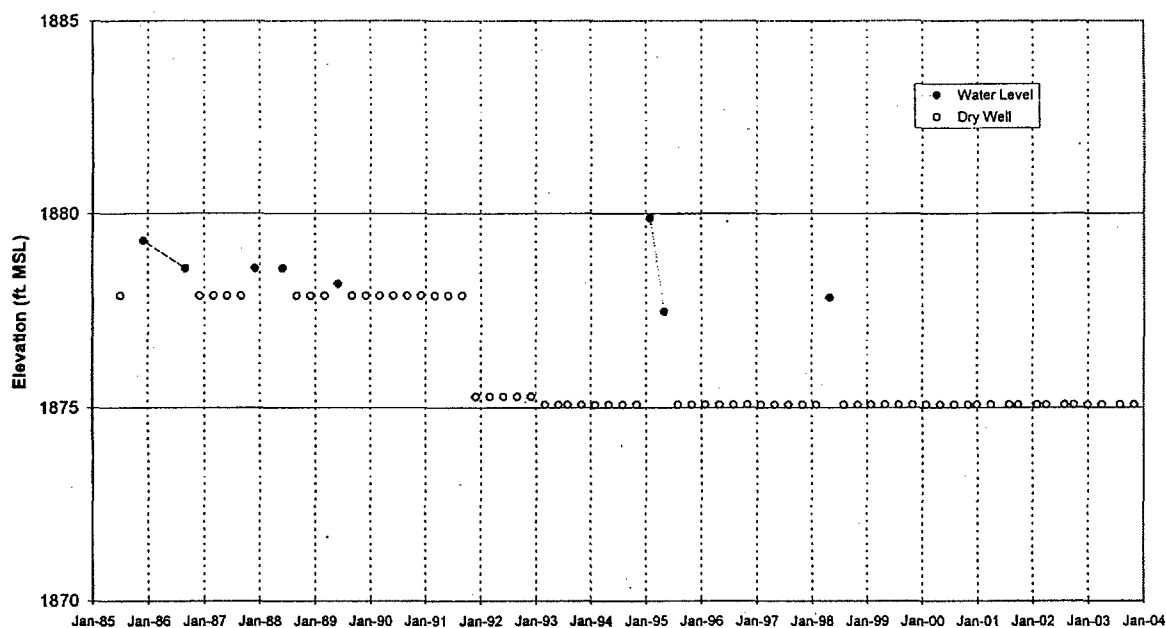
WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-10
Figure A-10

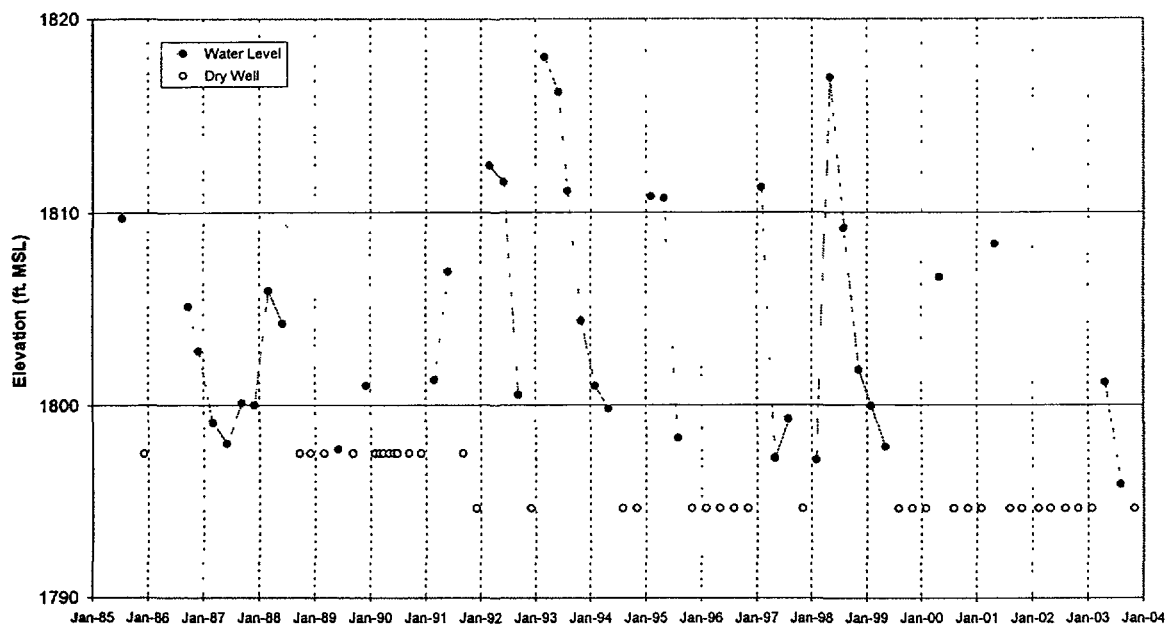


WATER LEVEL HYDROGRAPH
Shallow Zone Well SH-11
Figure A-11

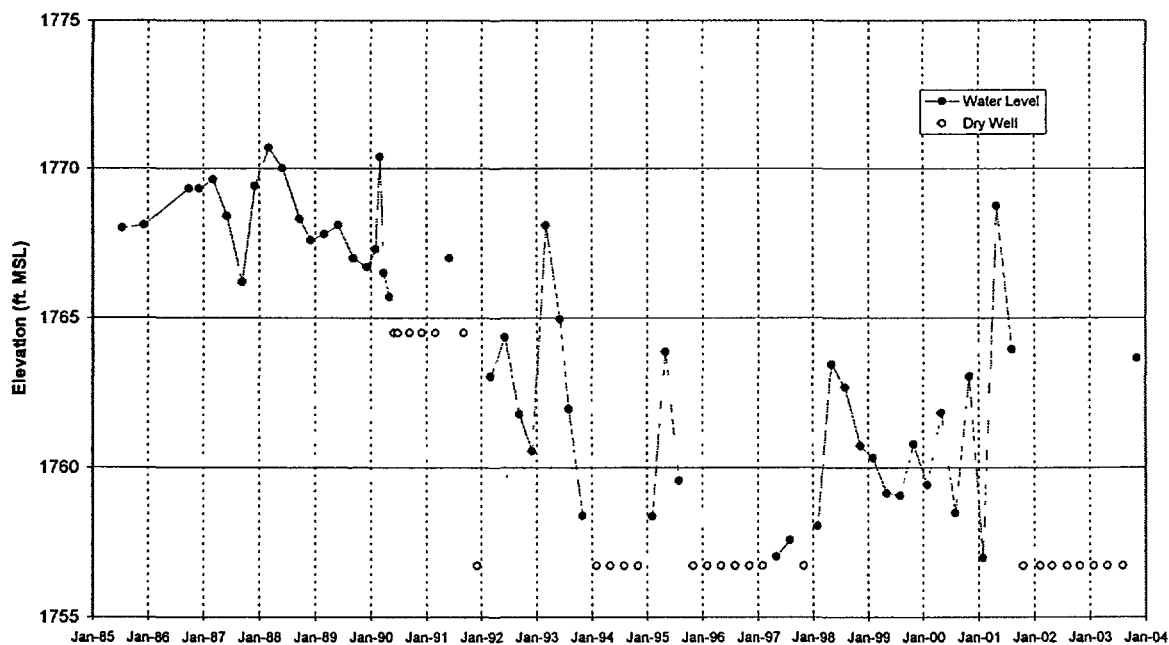


WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-1
Figure A-12

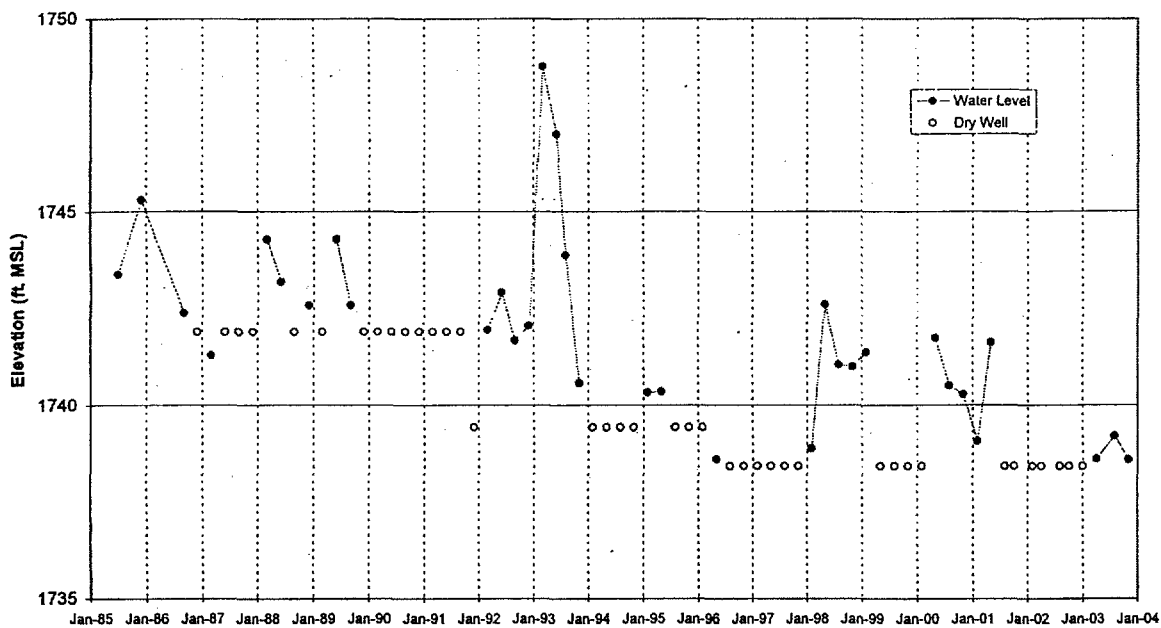




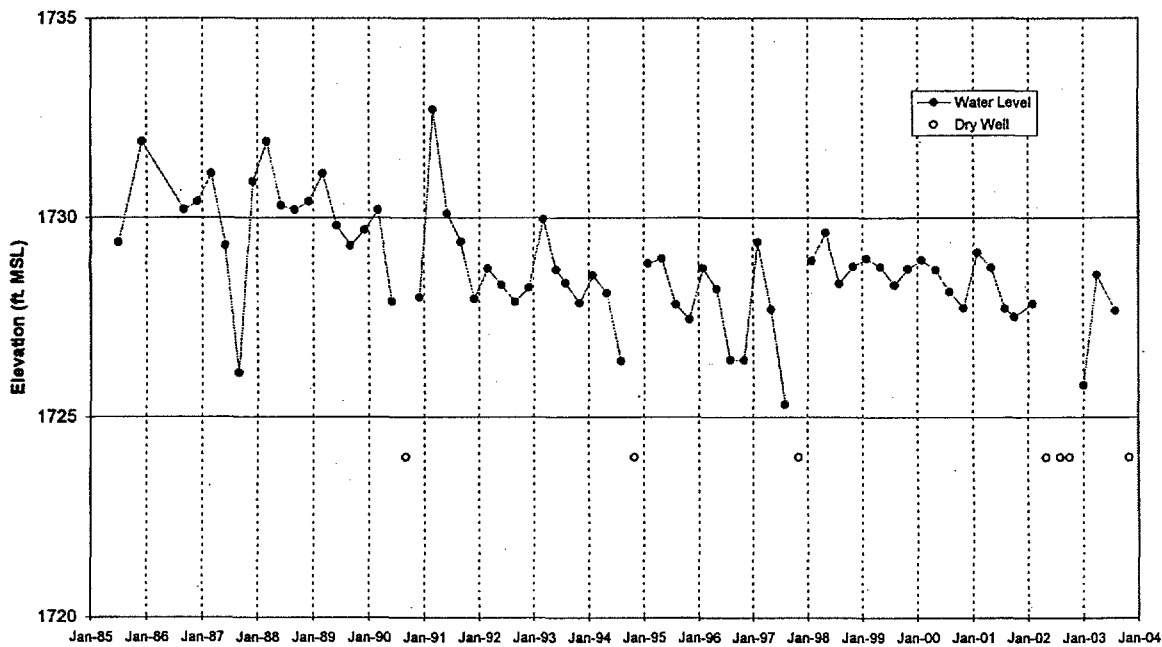
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-4
Figure A-15



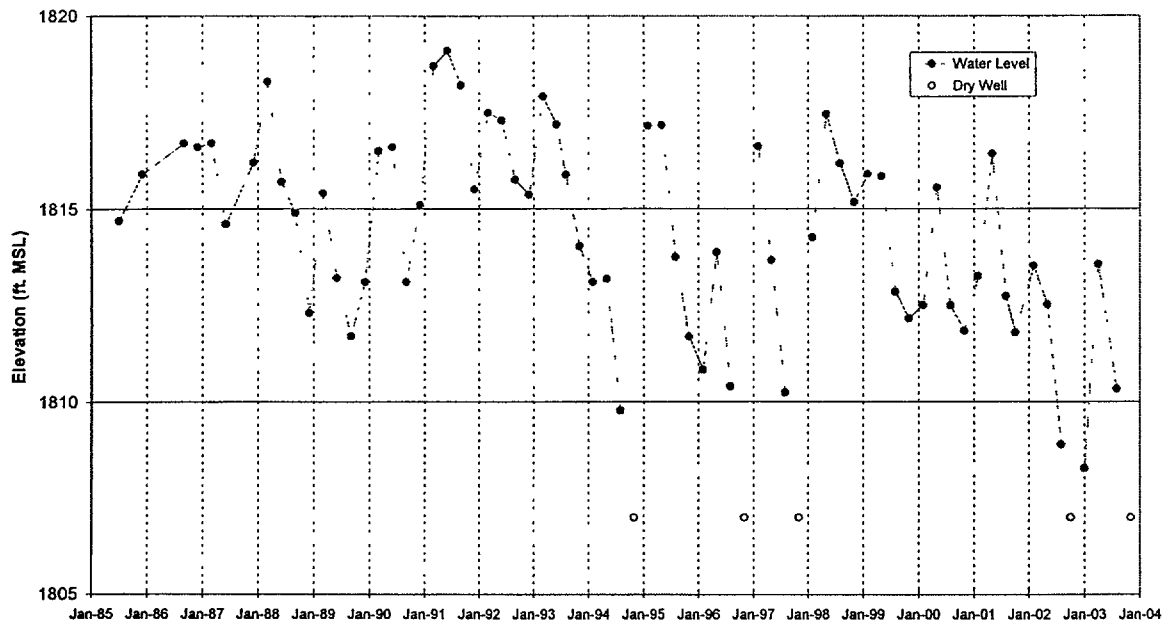
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-5
Figure A-16



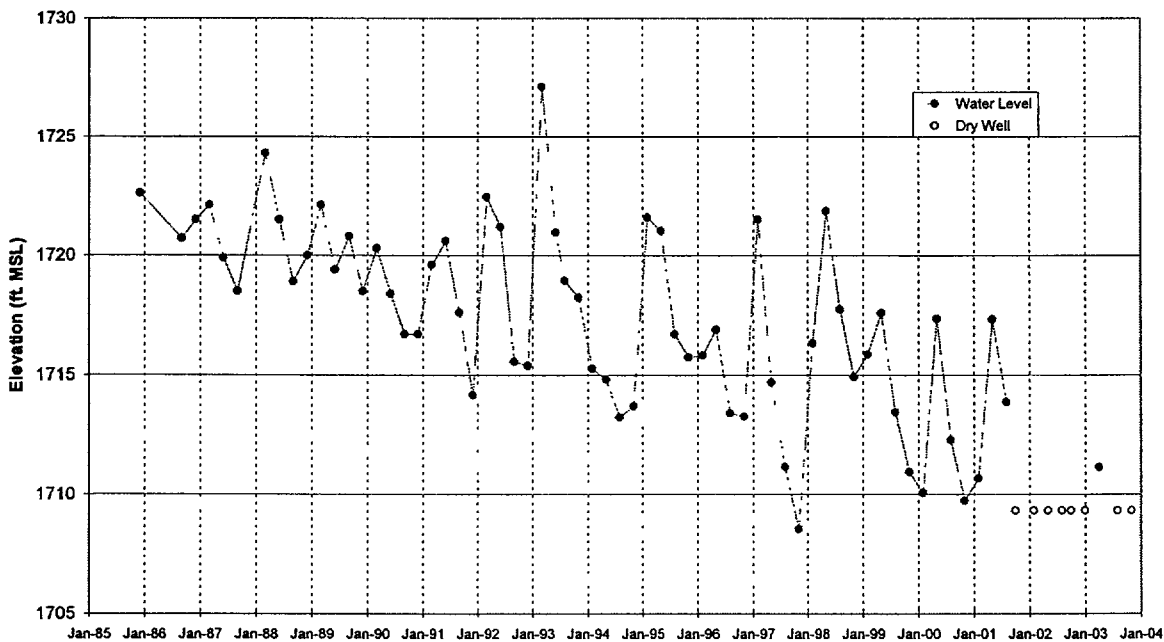
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-6
Figure A-17



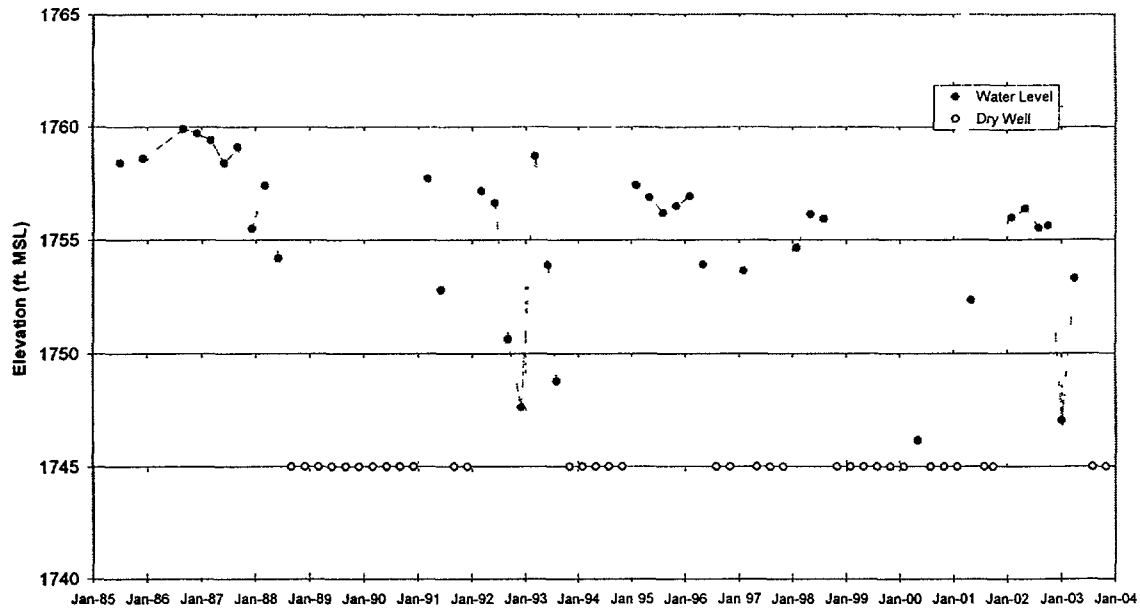
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-7
Figure A-18



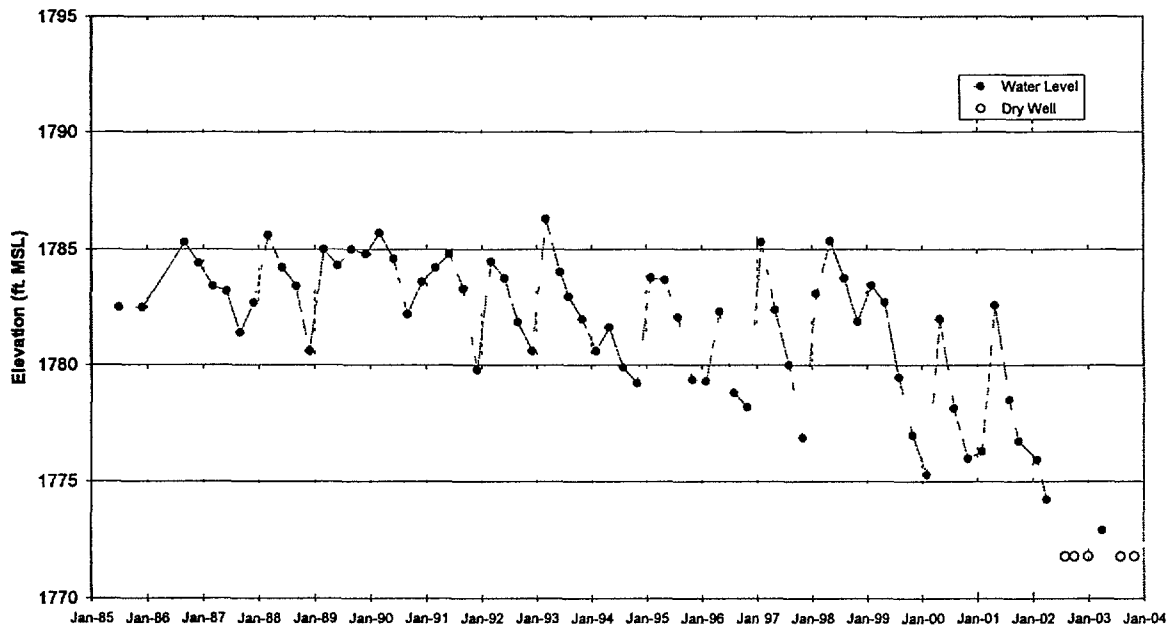
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-8
Figure A-19



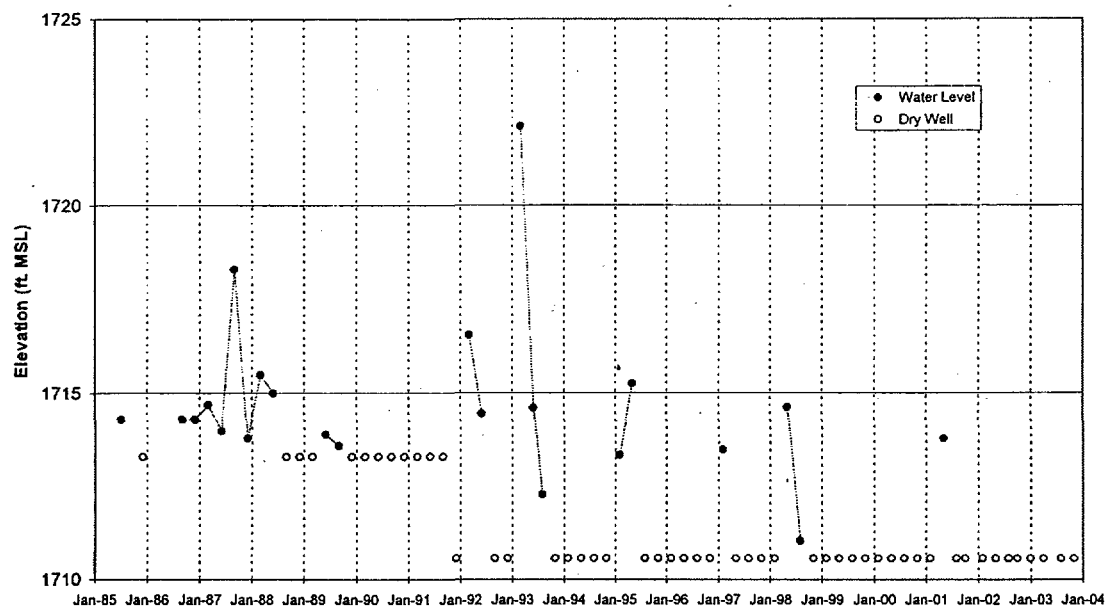
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-9
Figure A-20



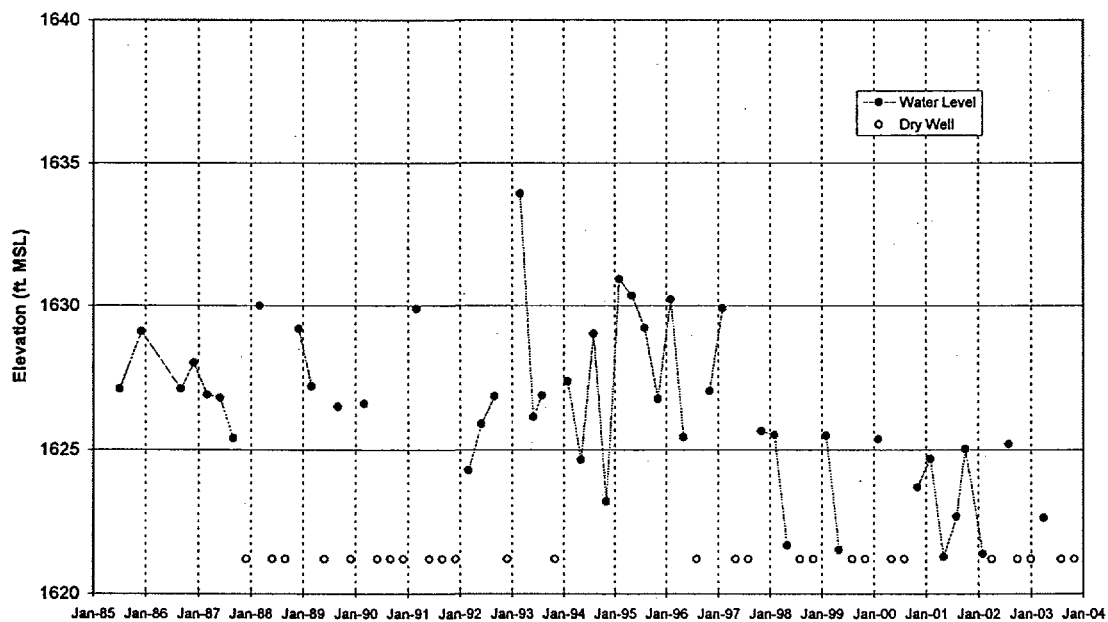
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS 10
Figure A-21



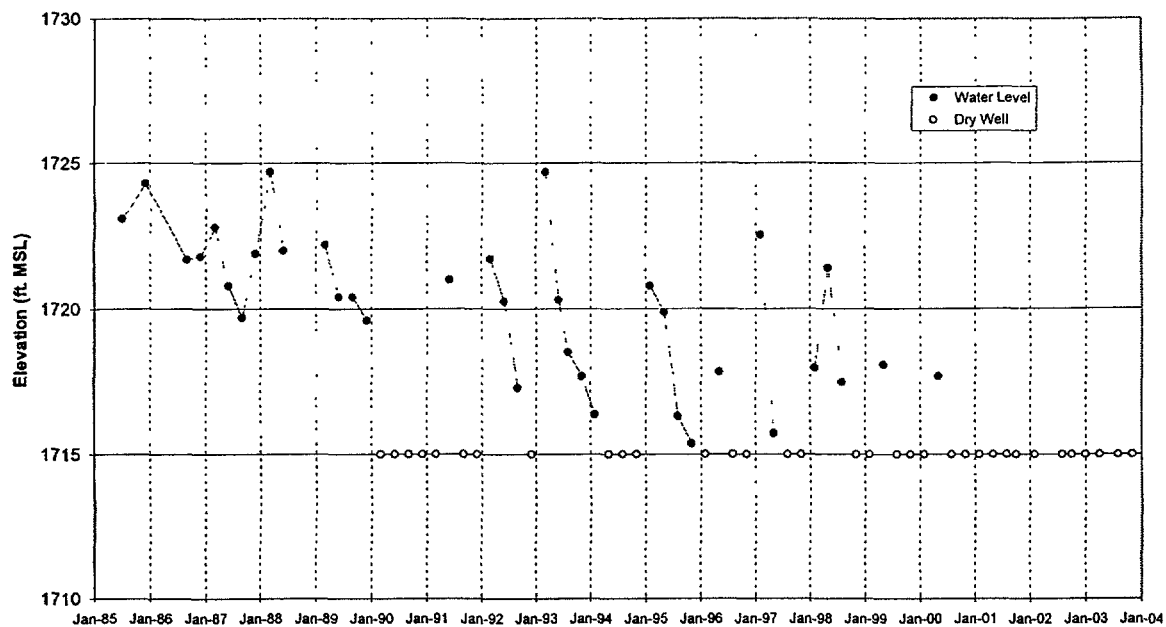
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-11
Figure A-22



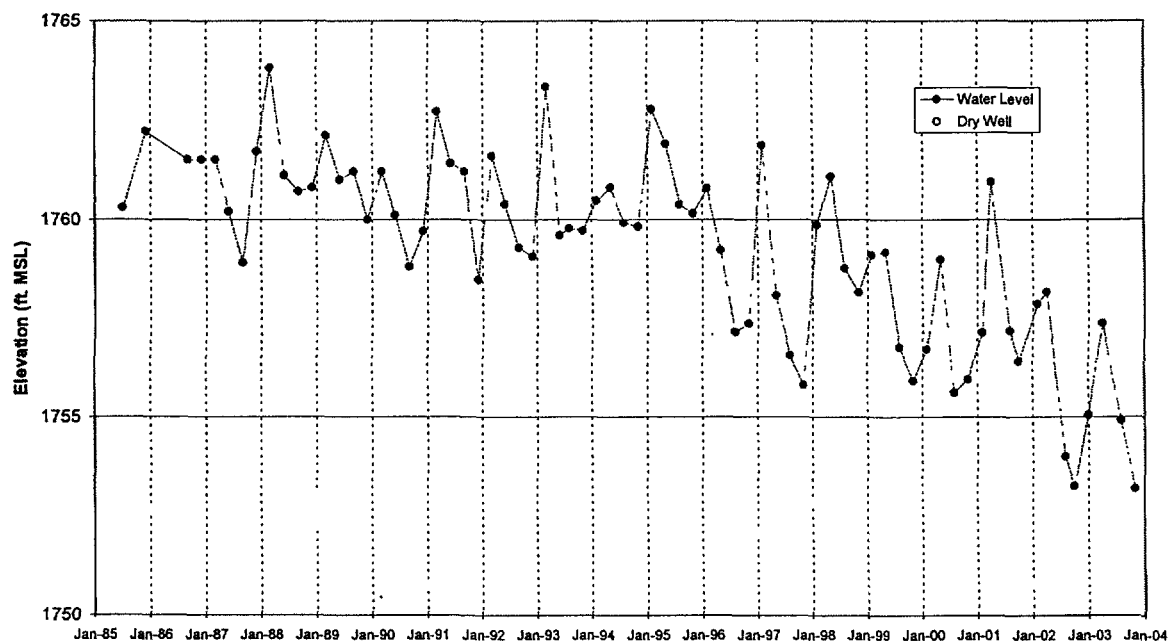
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-12
Figure A-23



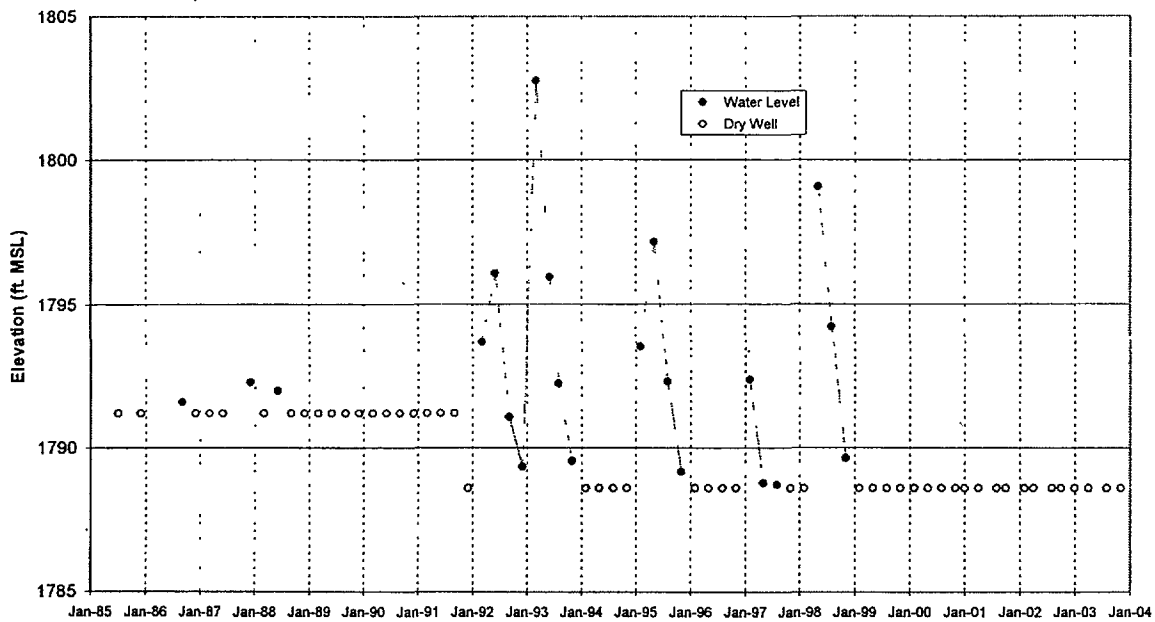
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-13
Figure A-24



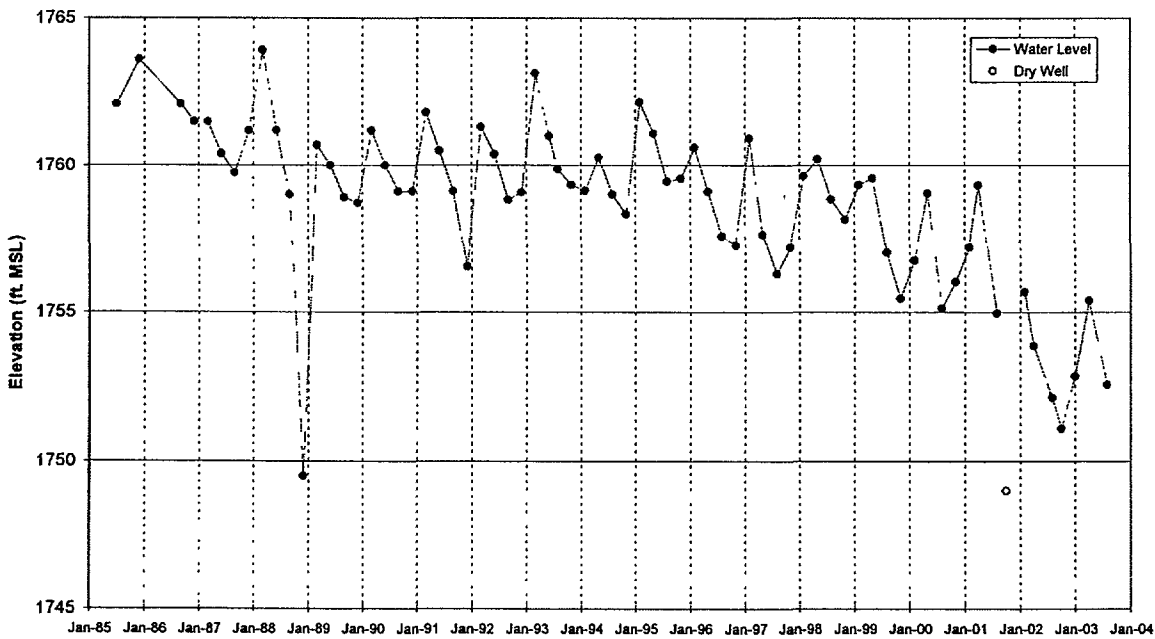
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-14
Figure A-25



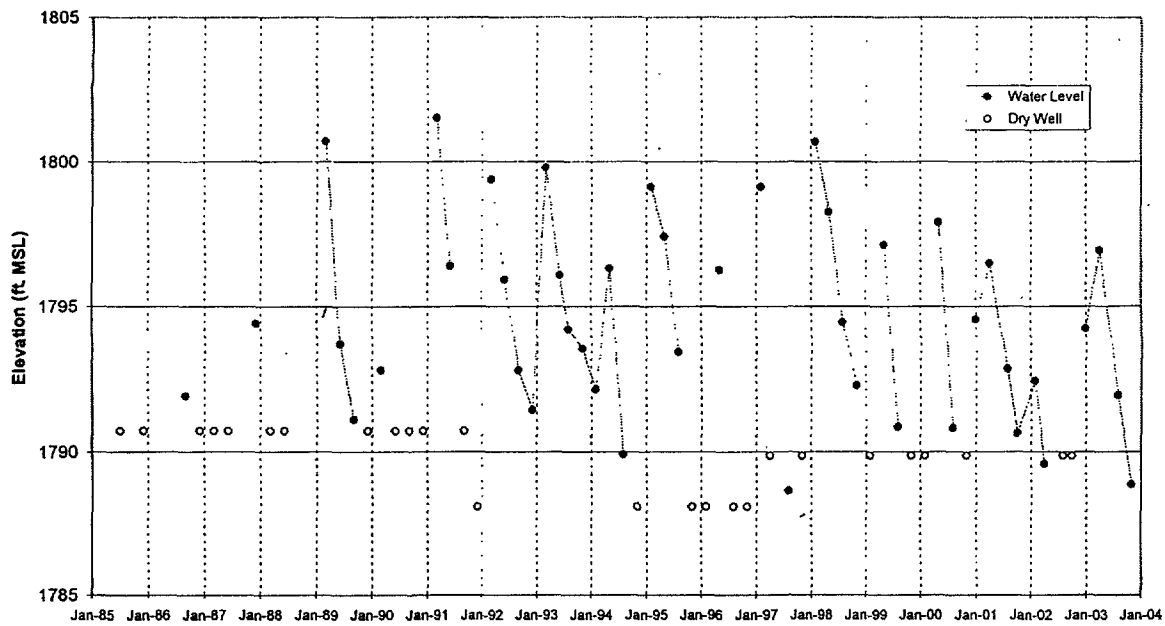
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-15
Figure A-26



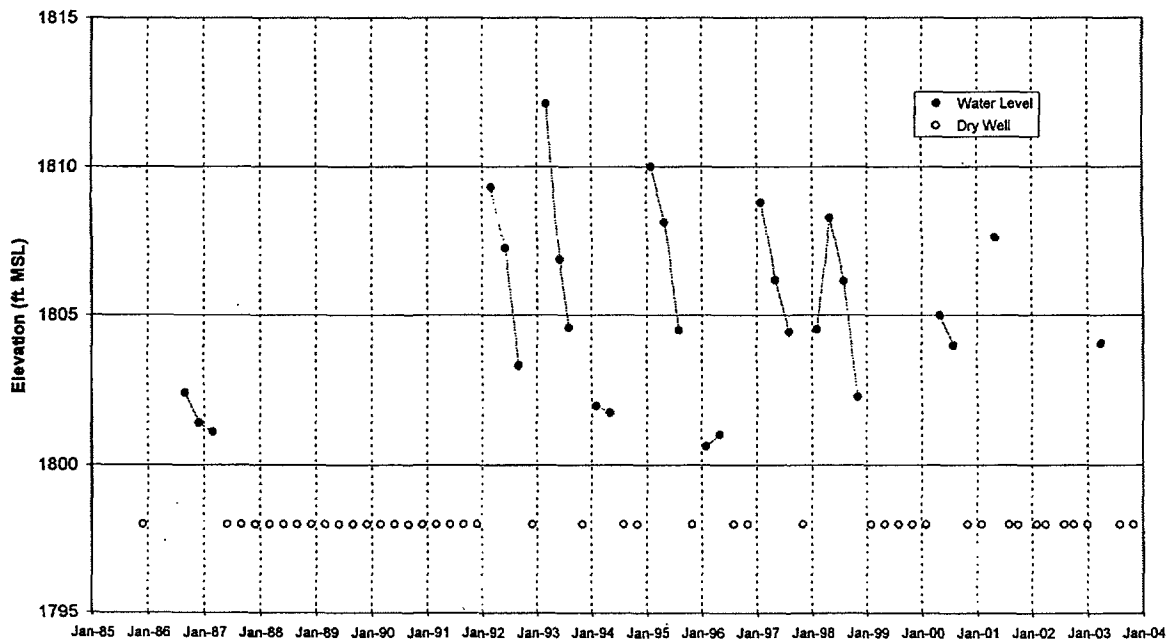
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-16
Figure A-27



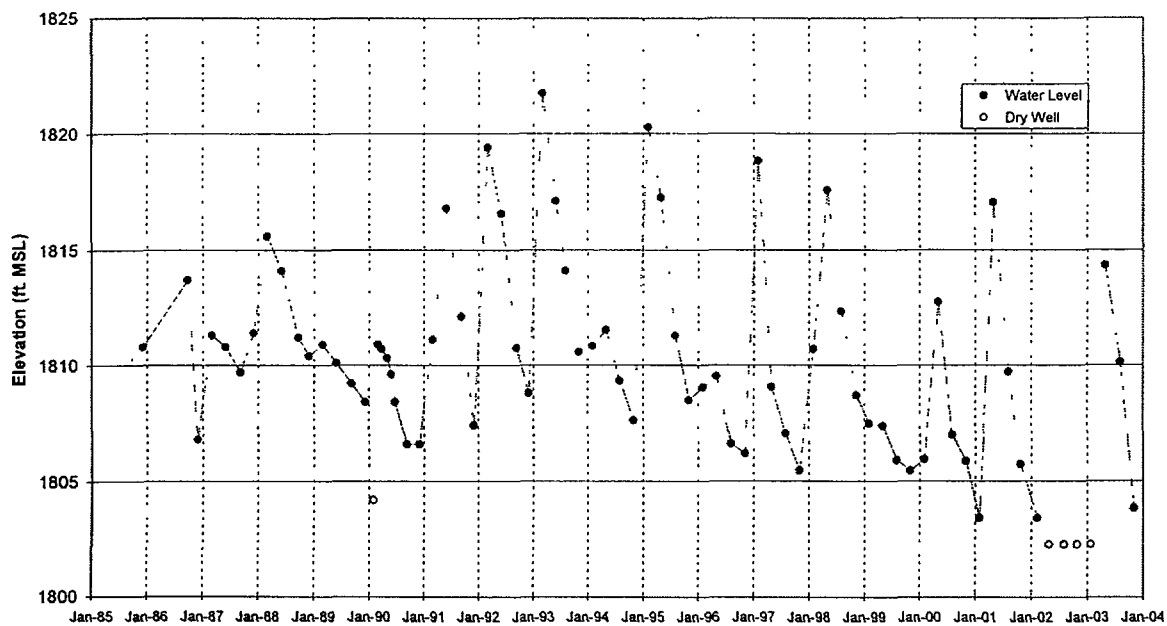
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-17
Figure A-28



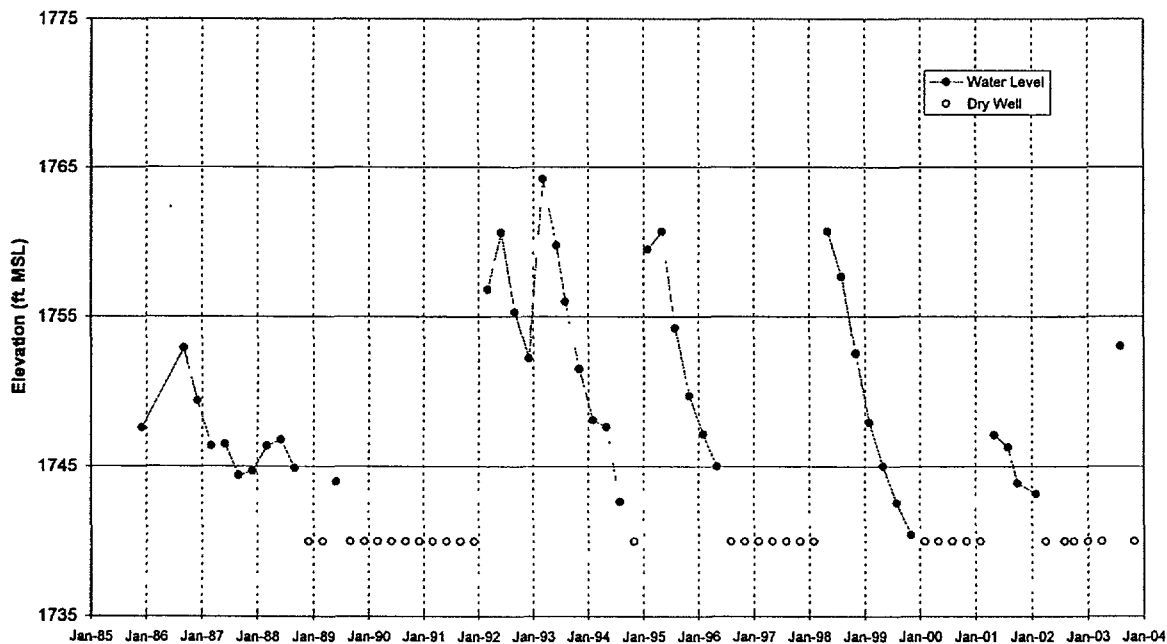
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-18
Figure A-29



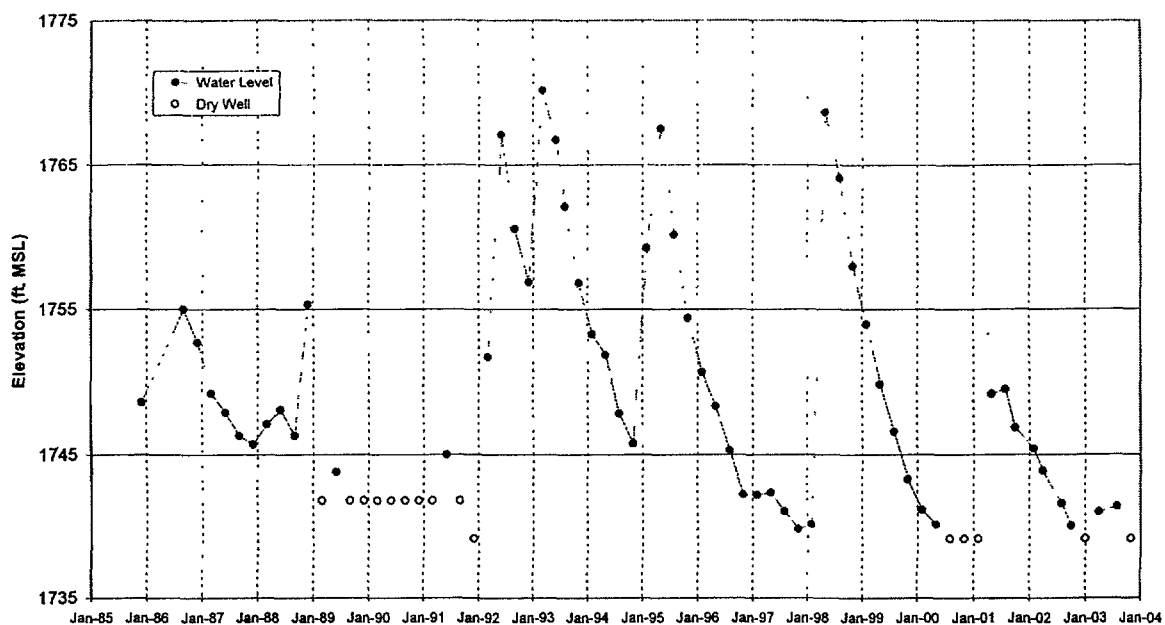
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-19
Figure A-30



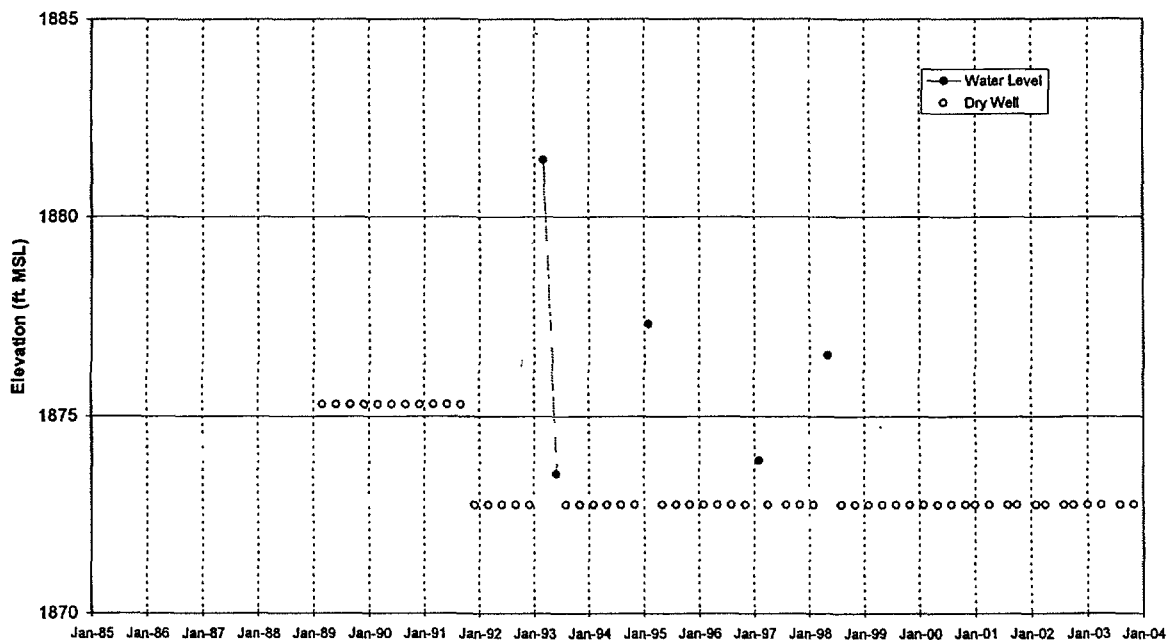
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-20
Figure A-31



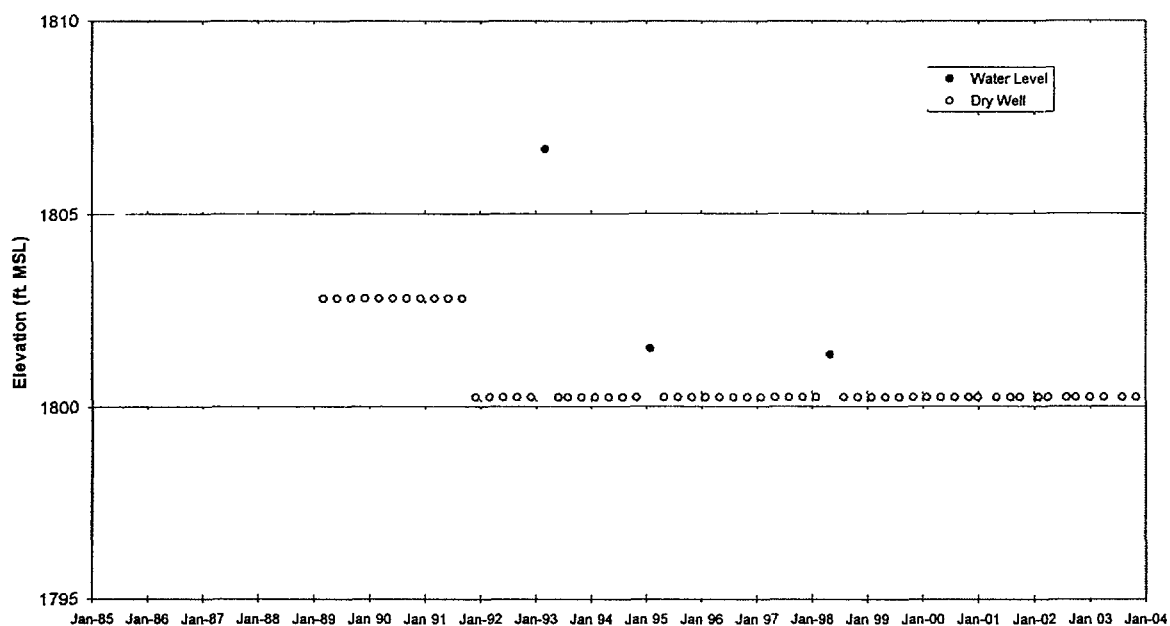
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-21
Figure A-32



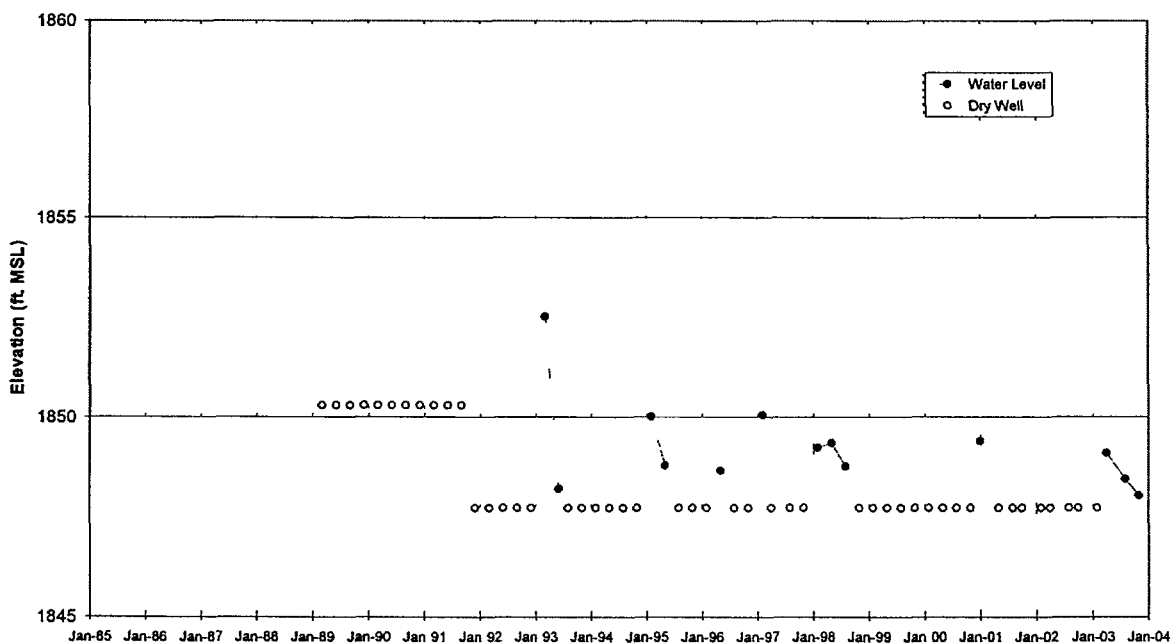
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-22
Figure A-33



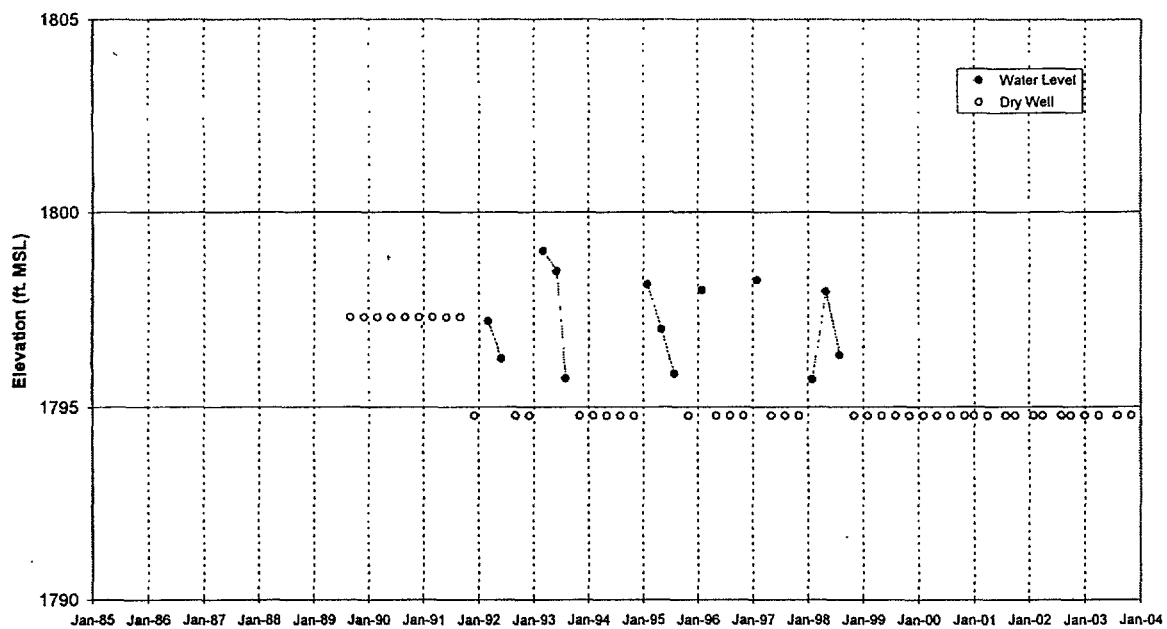
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-23
Figure A-34



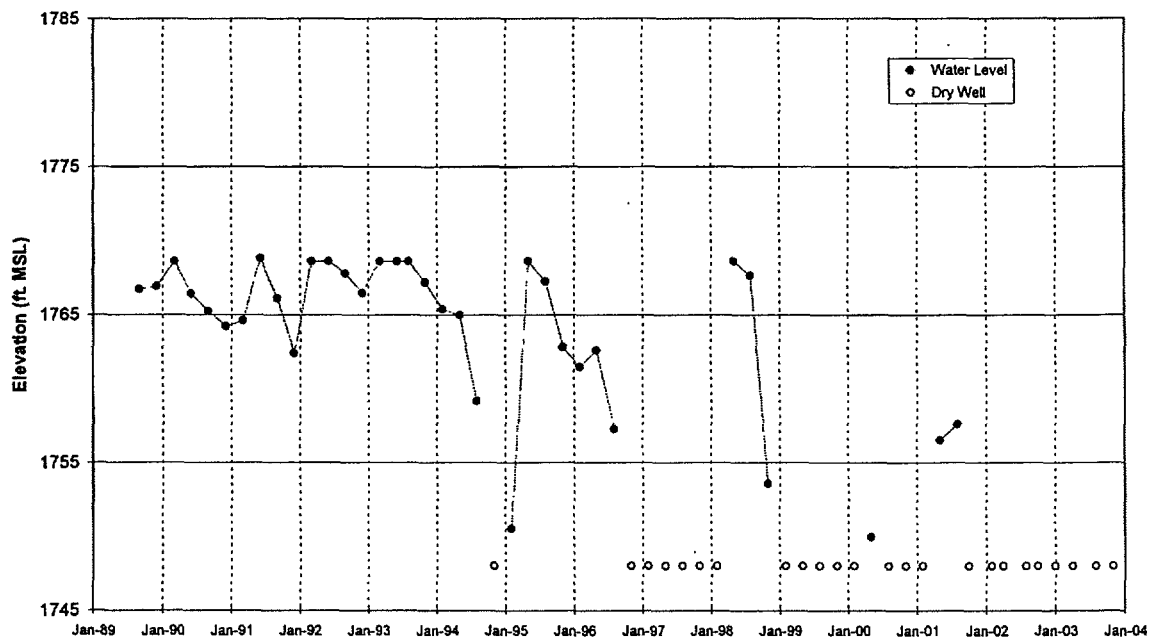
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS 24
Figure A-35



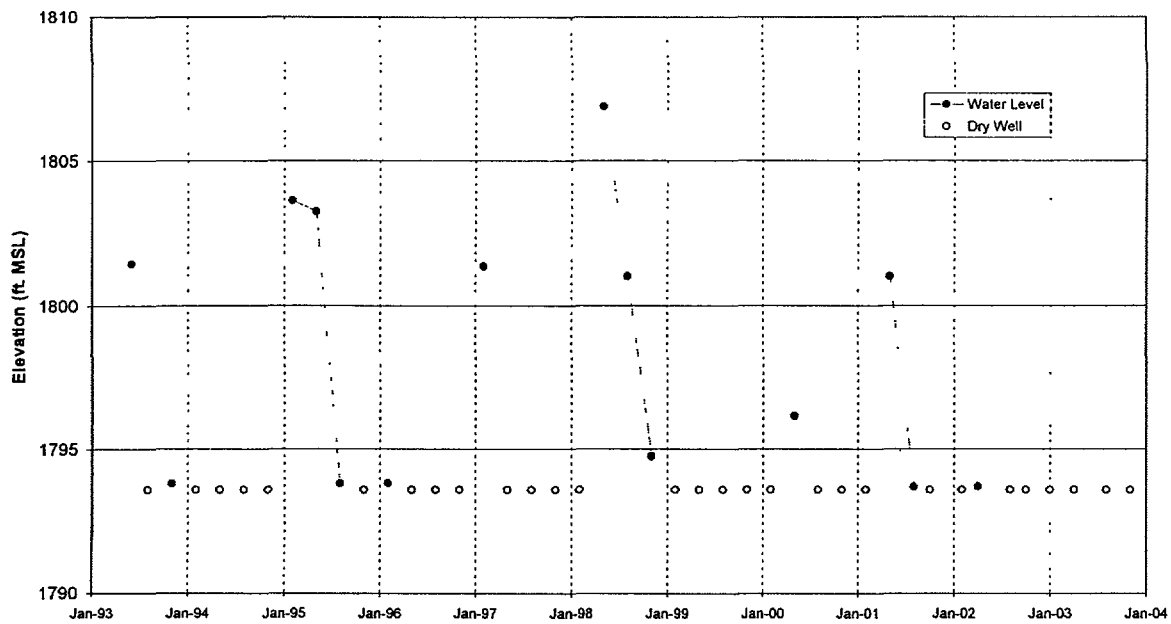
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS 25
Figure A-36



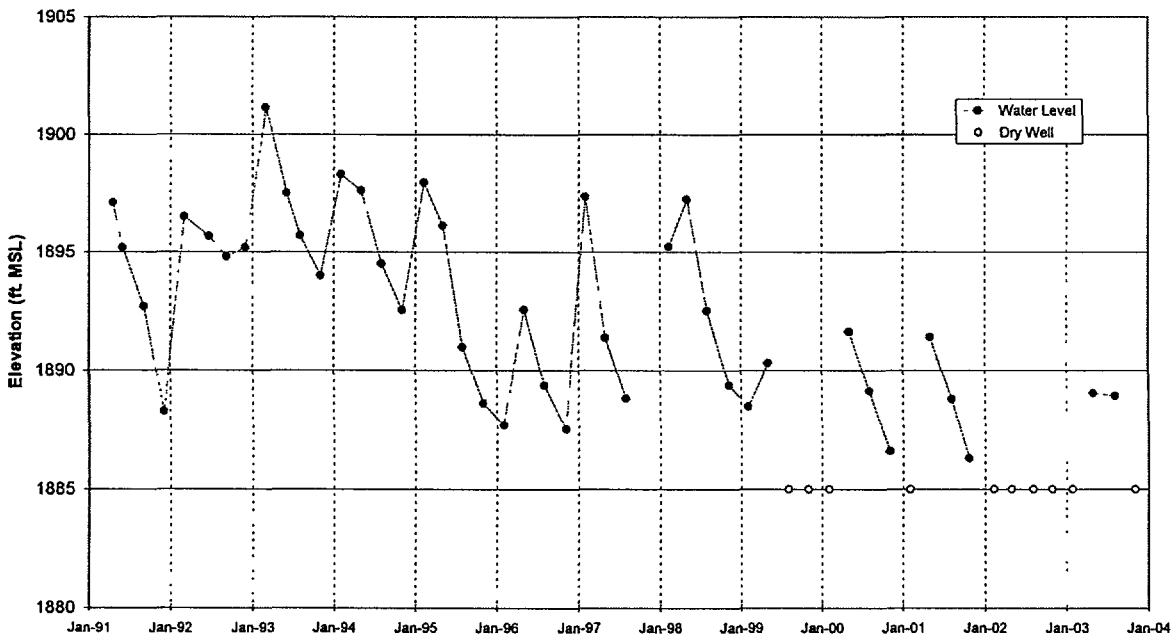
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-27
Figure A-37



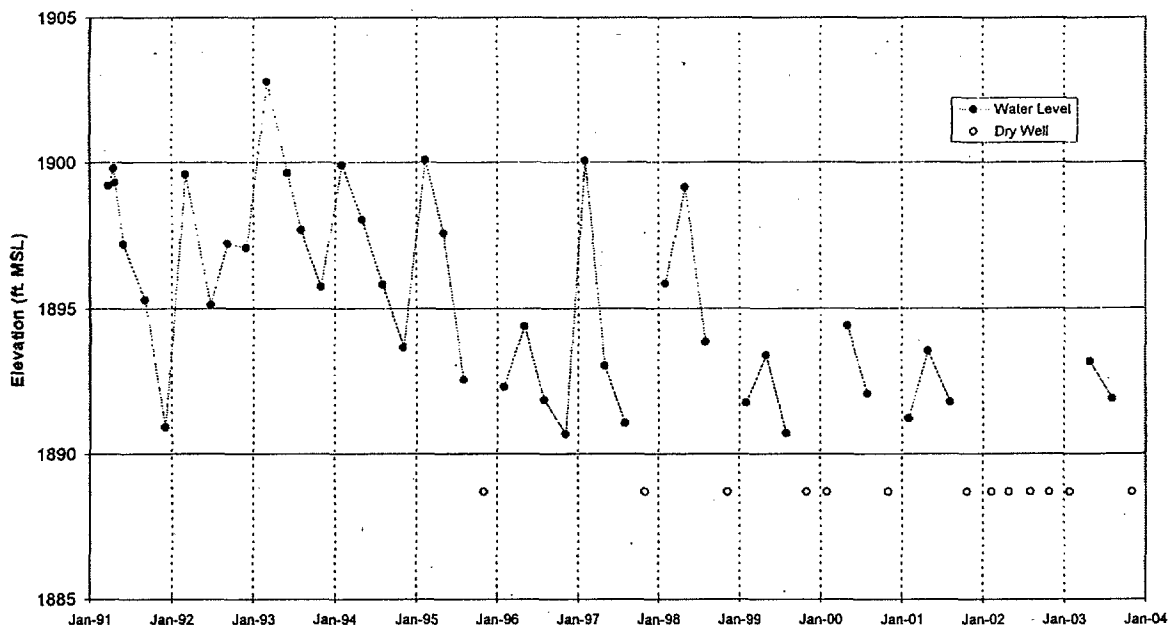
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-28
Figure A-38



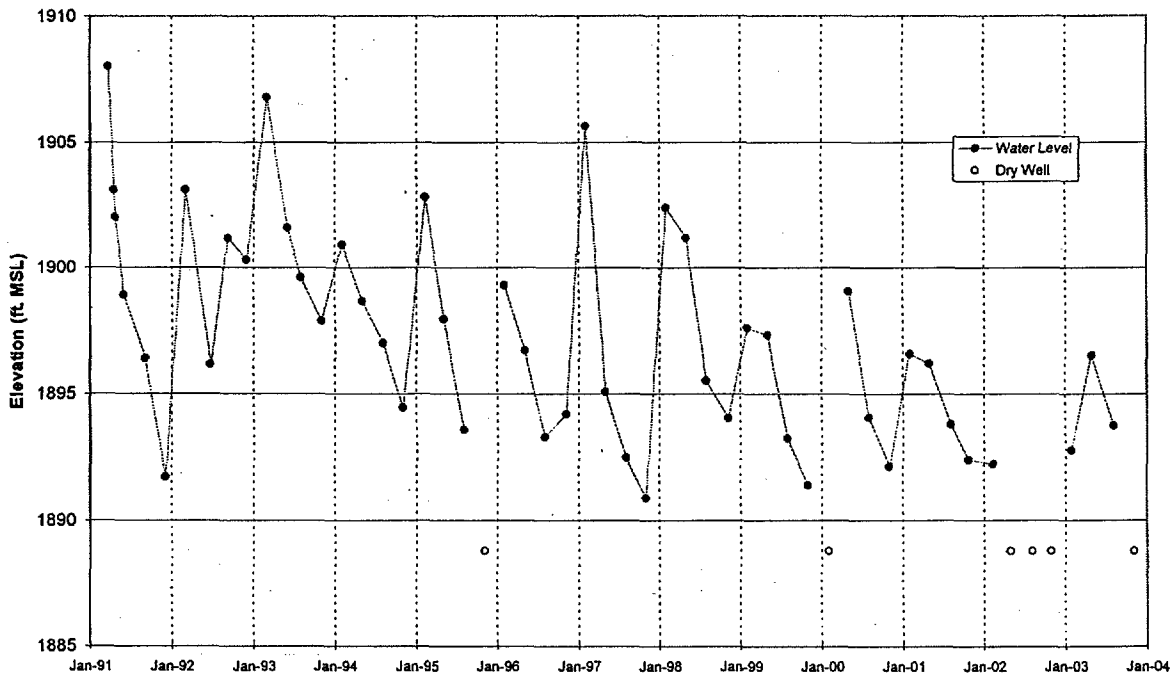
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-29
Figure A-39



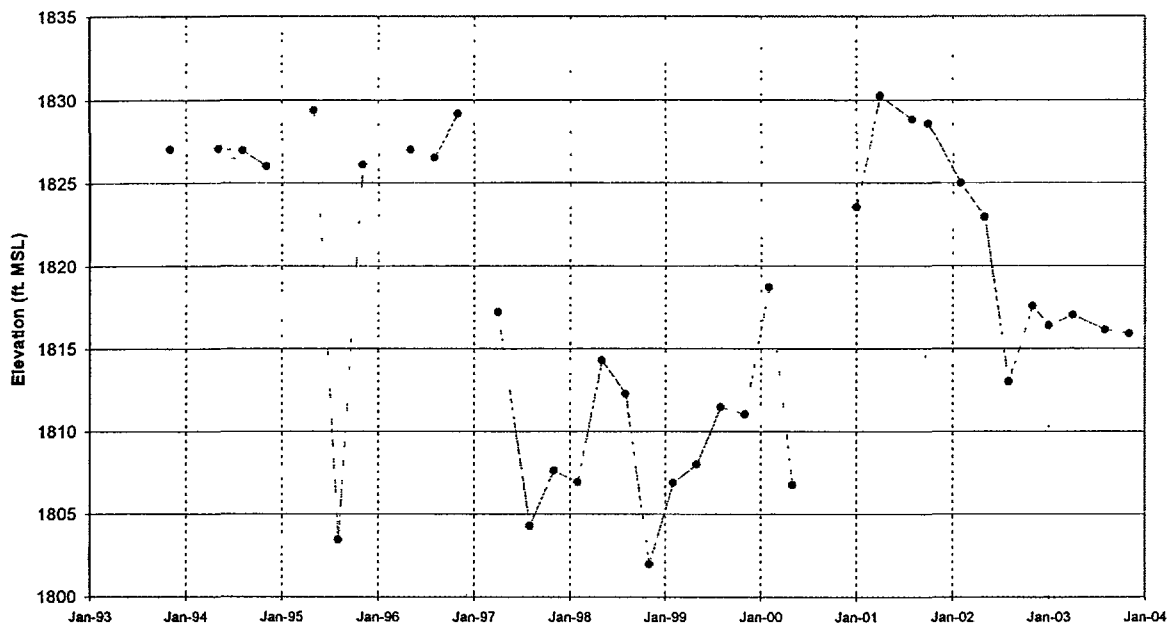
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-30
Figure A-40



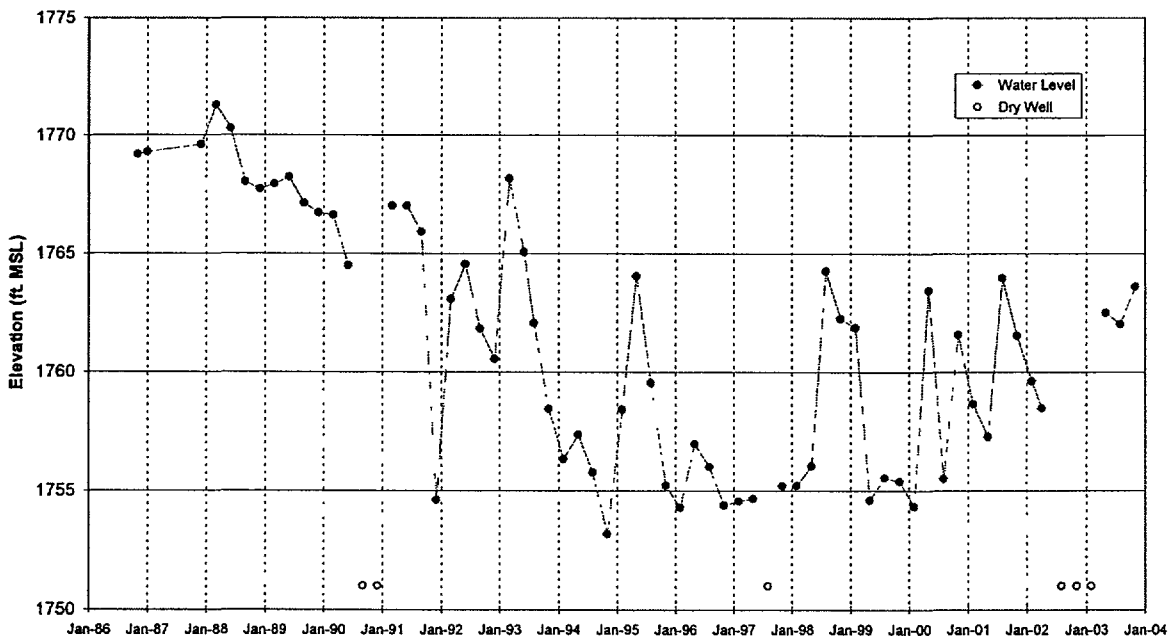
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-31
Figure A-41



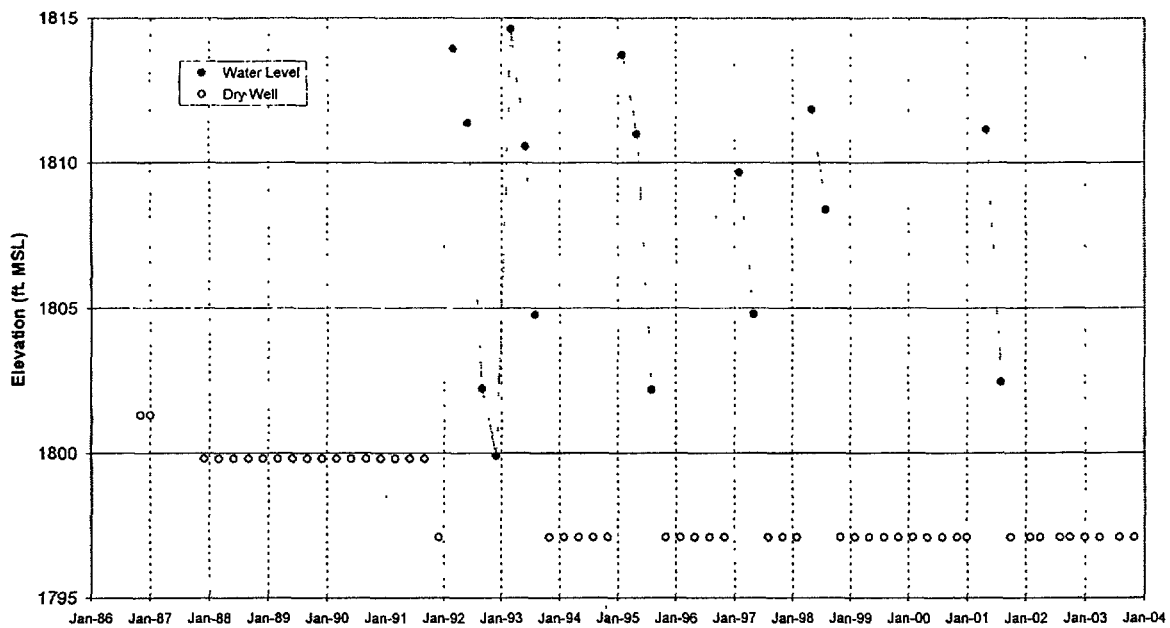
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-32
Figure A-42



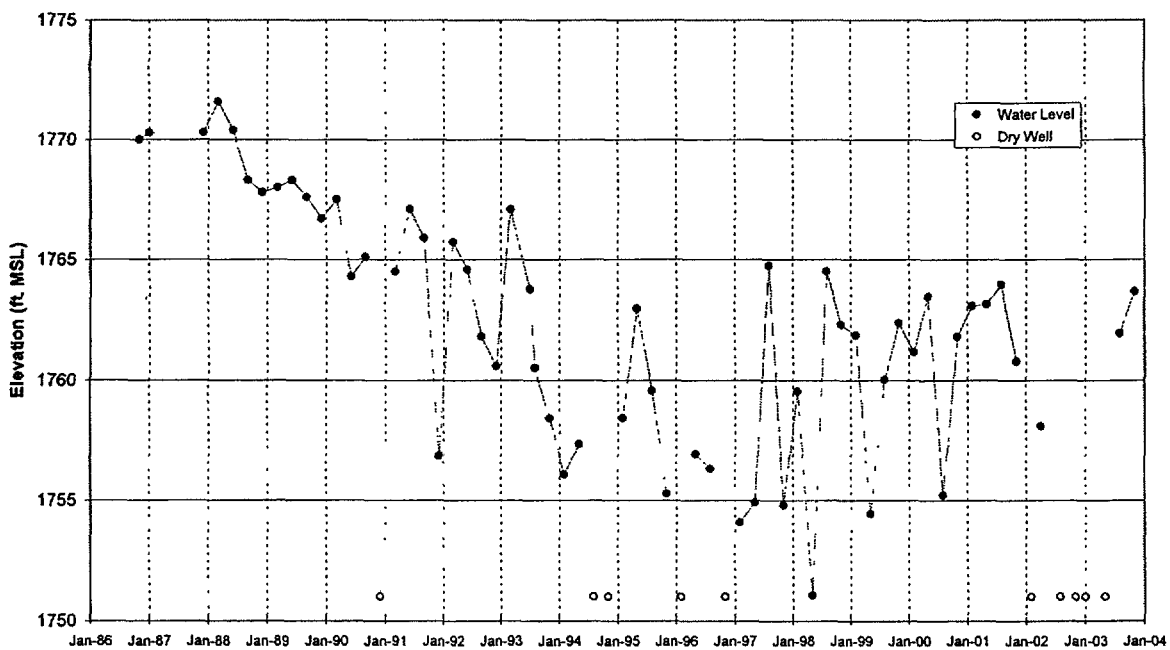
WATER LEVEL HYDROGRAPH
Shallow Zone Well RS-54
Figure A-43



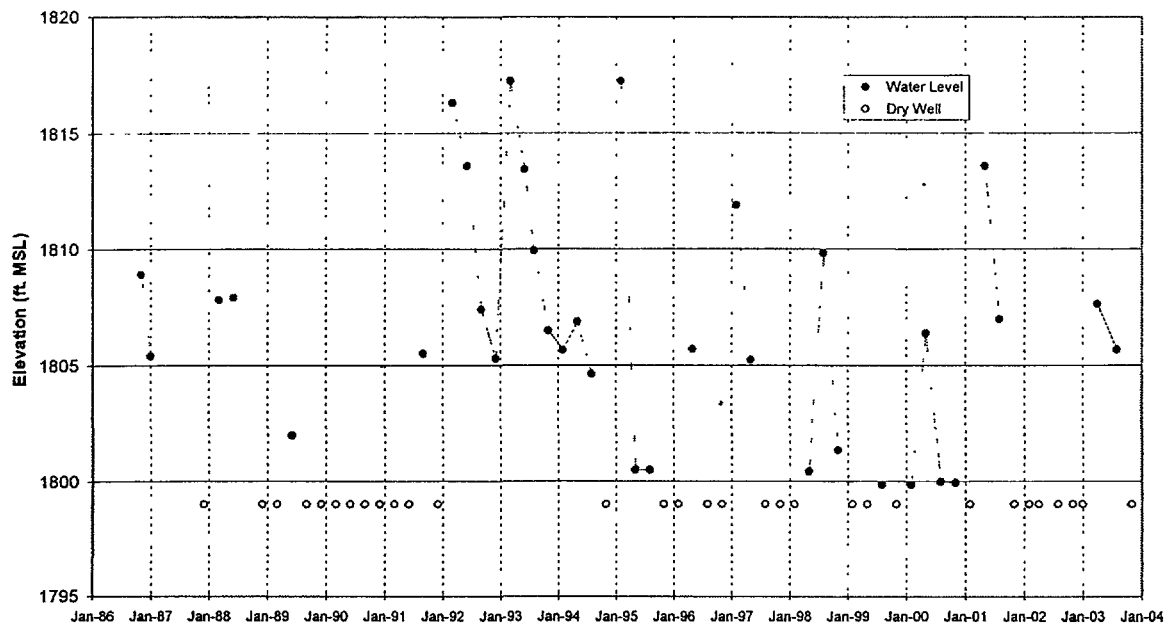
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-1
Figure A-44



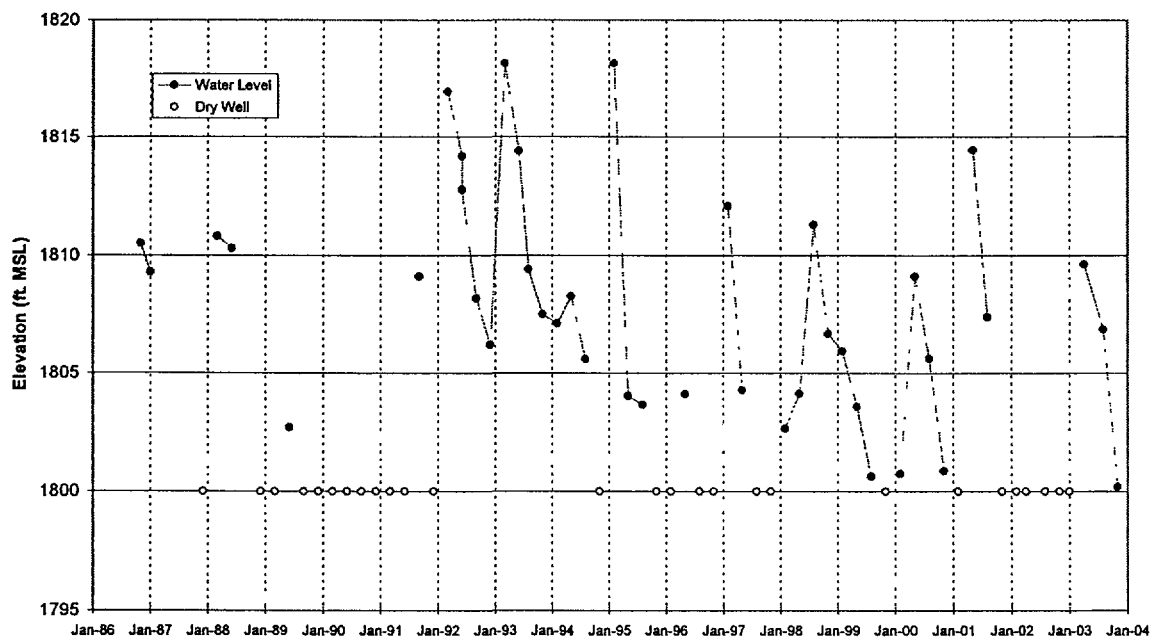
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-2
Figure A-45



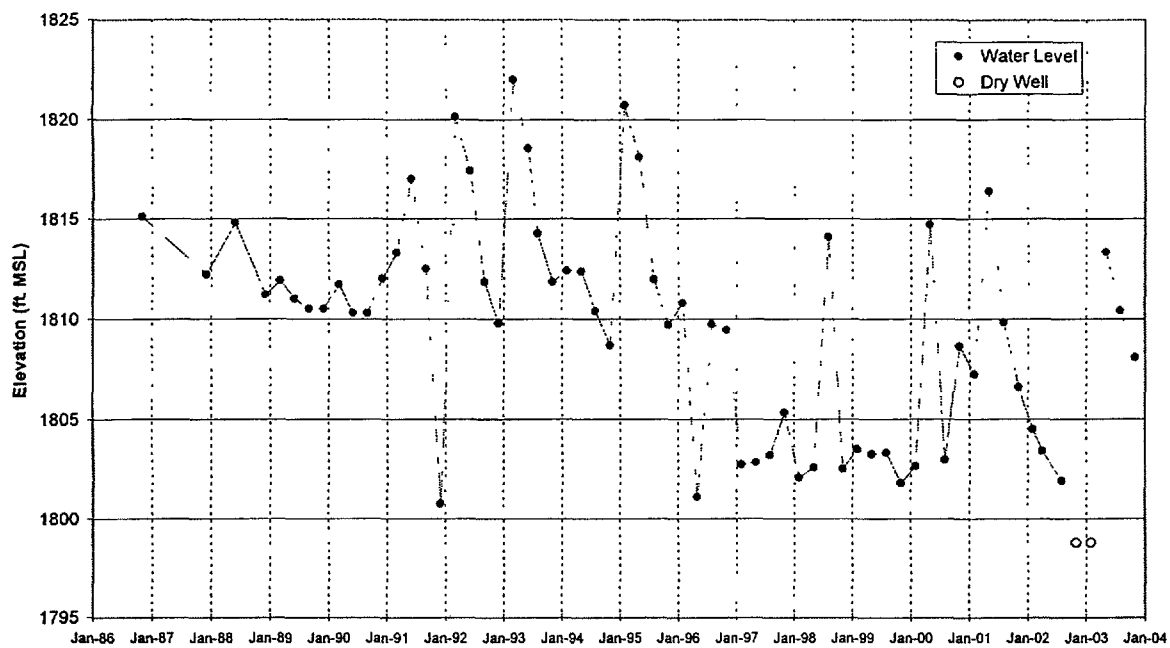
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-3
Figure A-46



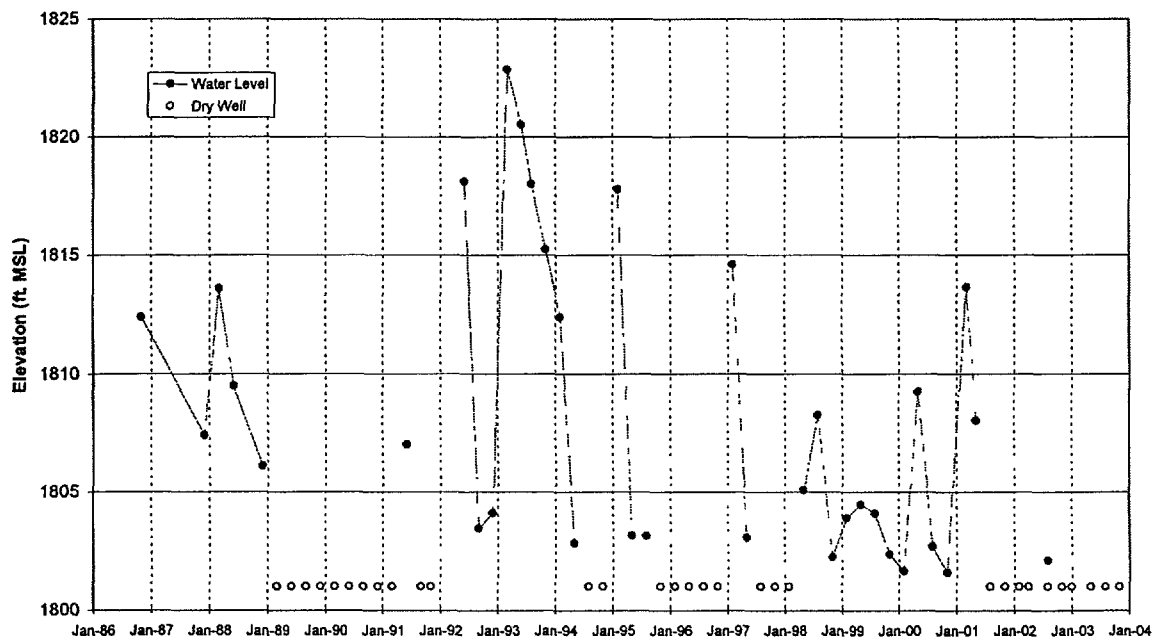
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-4
Figure A-47



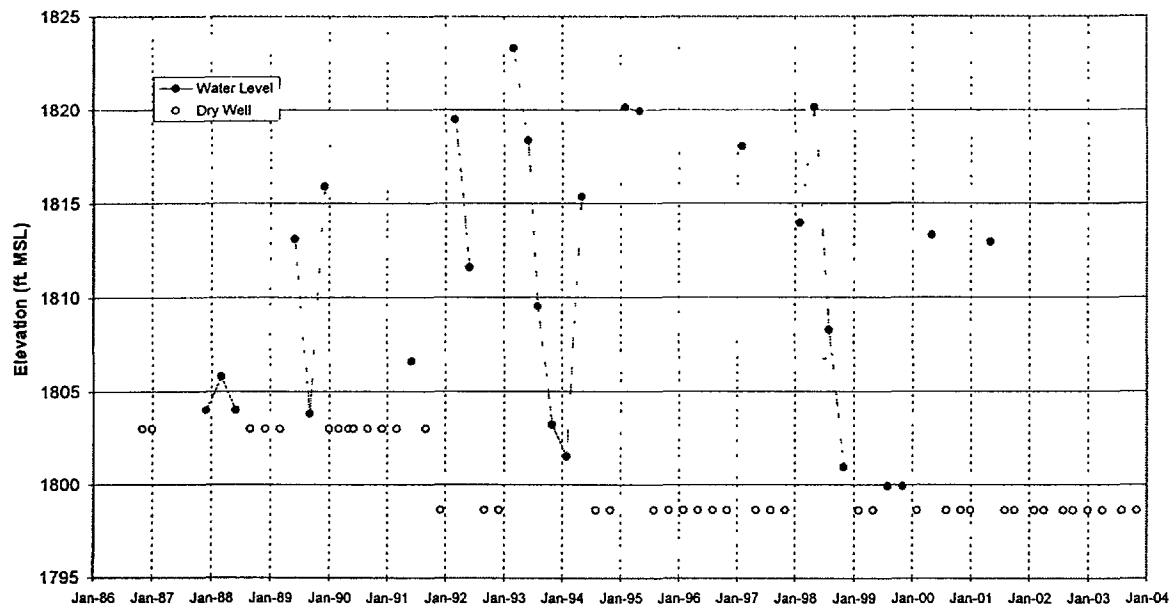
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-5
Figure A-48



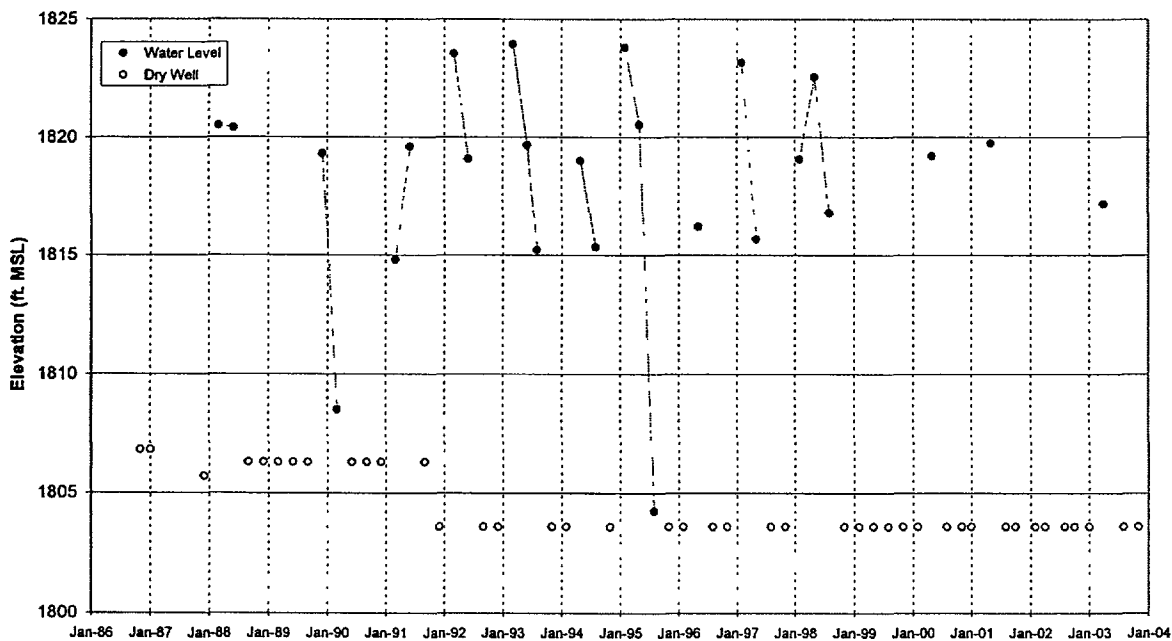
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-6
Figure A-49



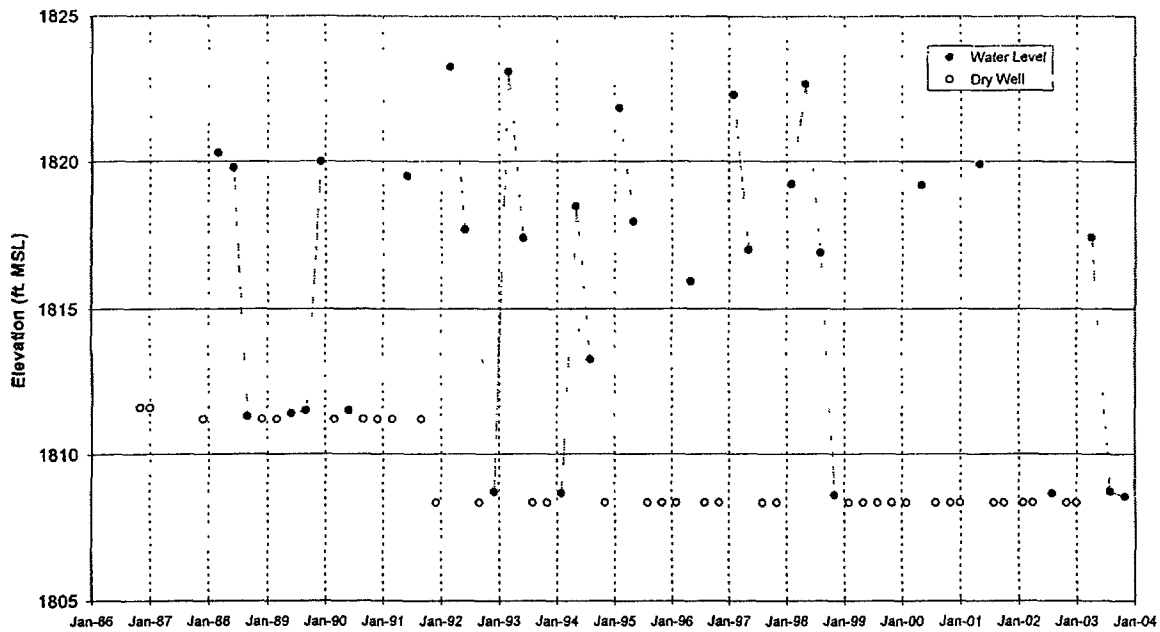
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-7
Figure A-50



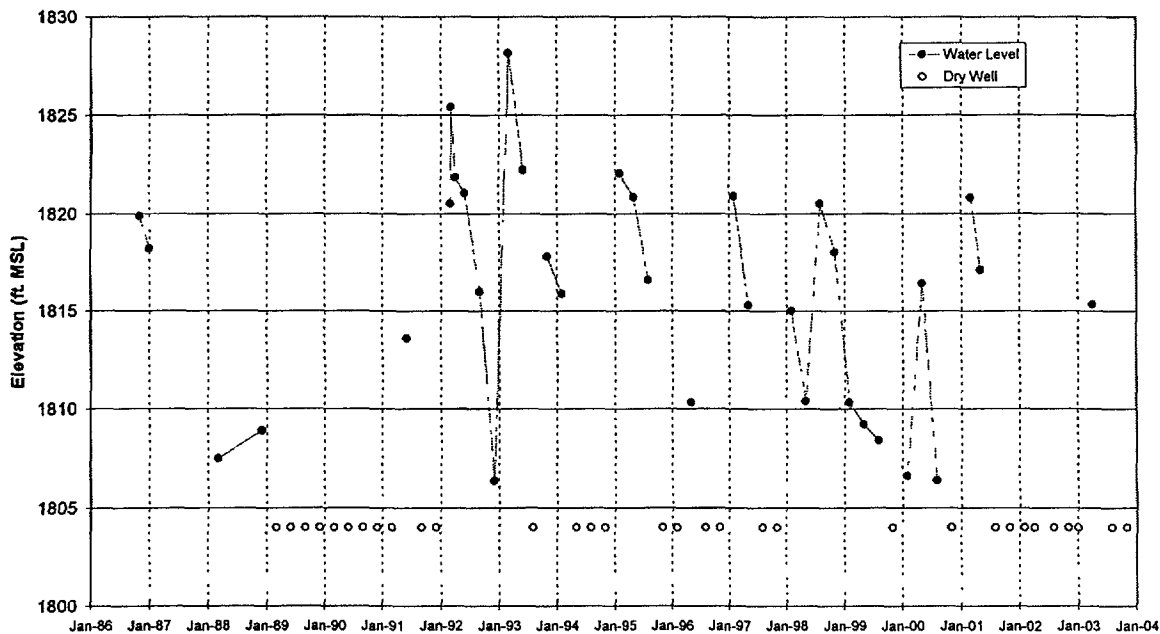
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-8
Figure A-51



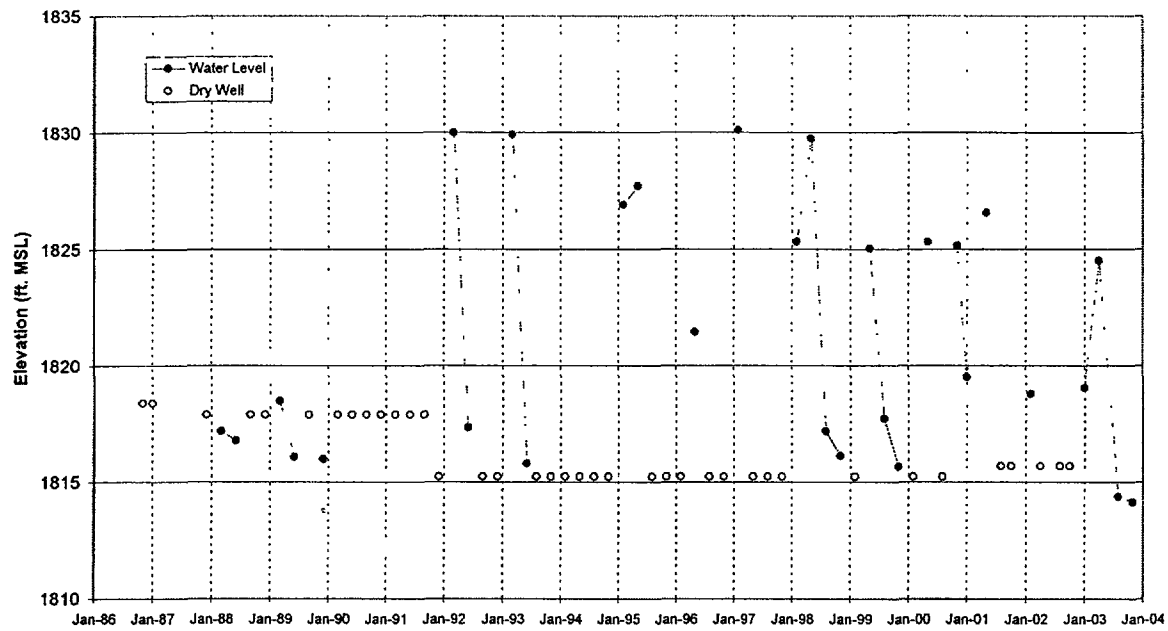
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-9
Figure A-52



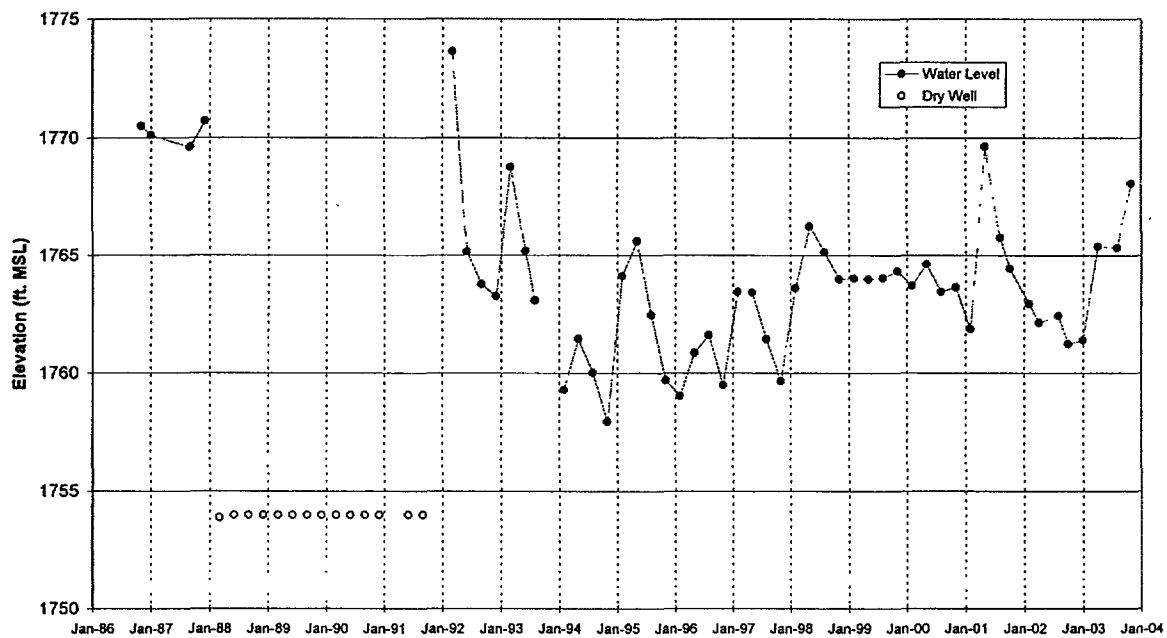
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-10
Figure A-53



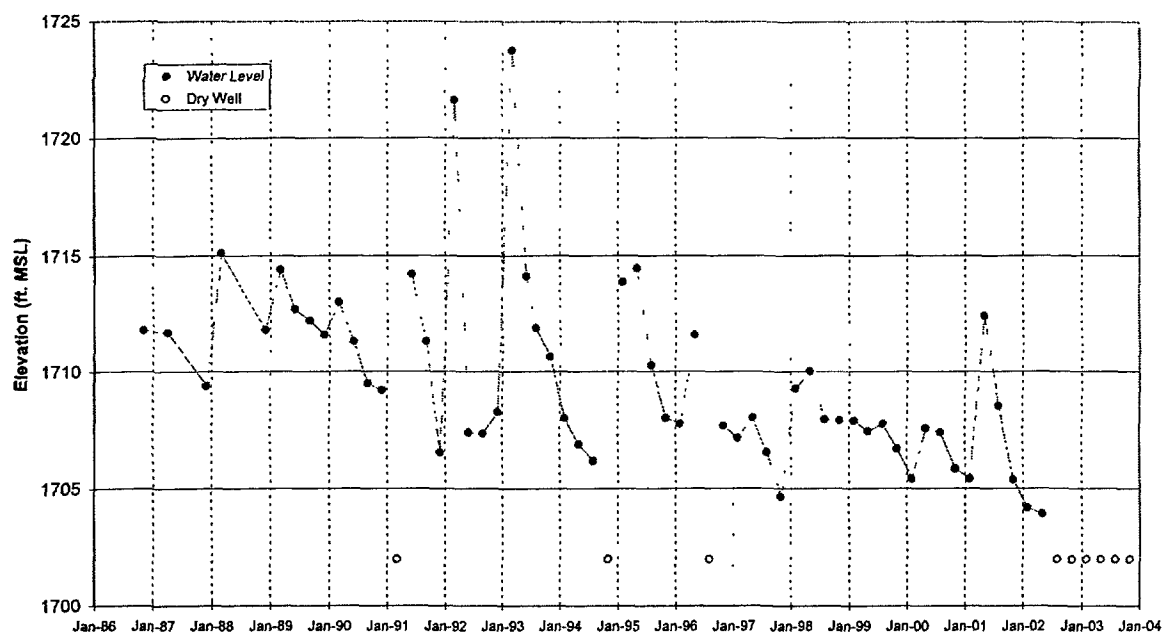
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-11
Figure A-54



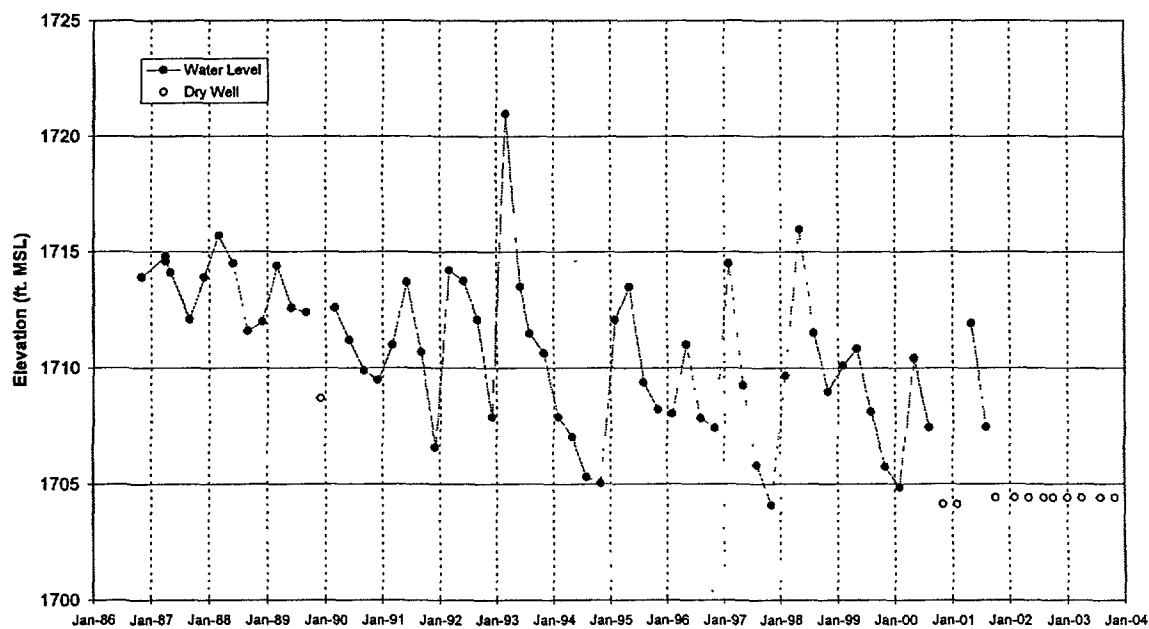
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-12
Figure A-55



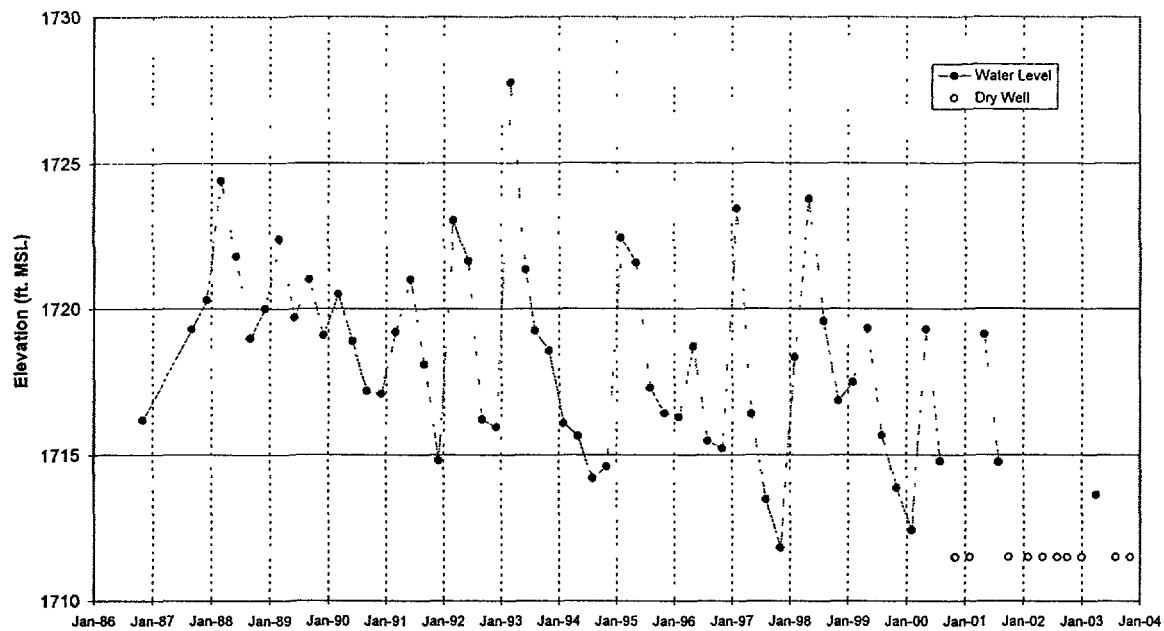
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-13
Figure A-56



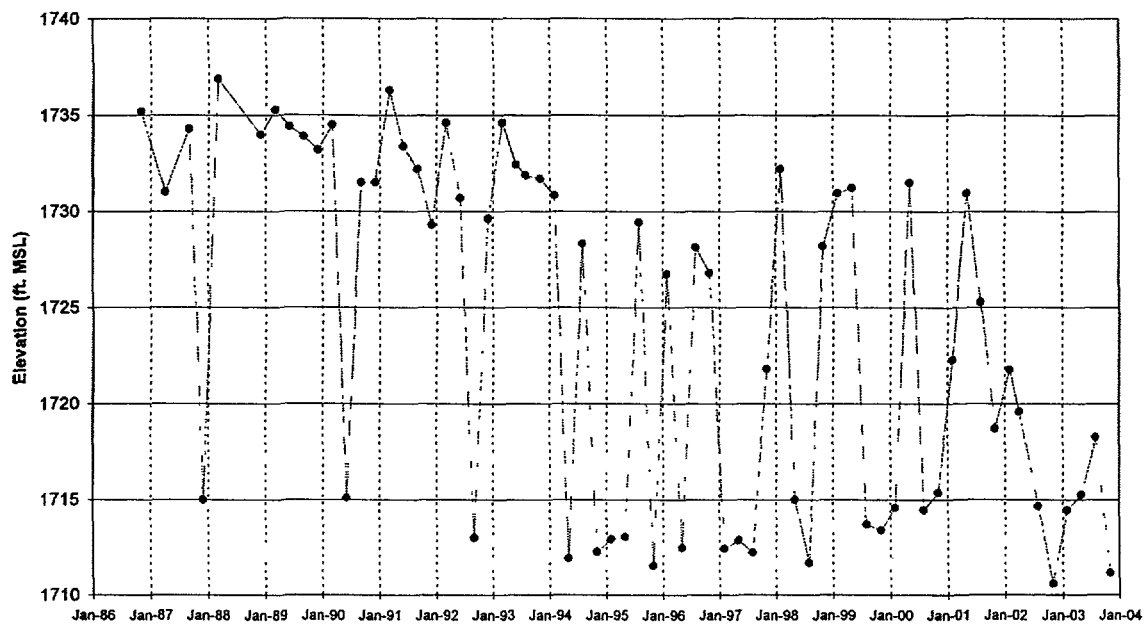
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-14
Figure A-57



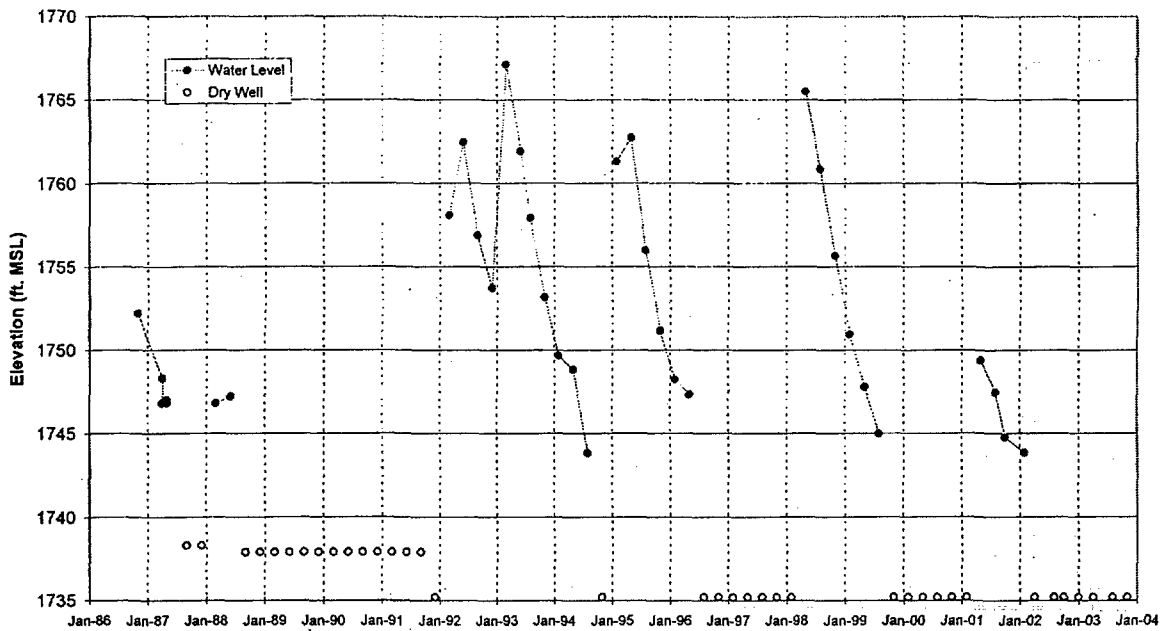
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-15
Figure A-58



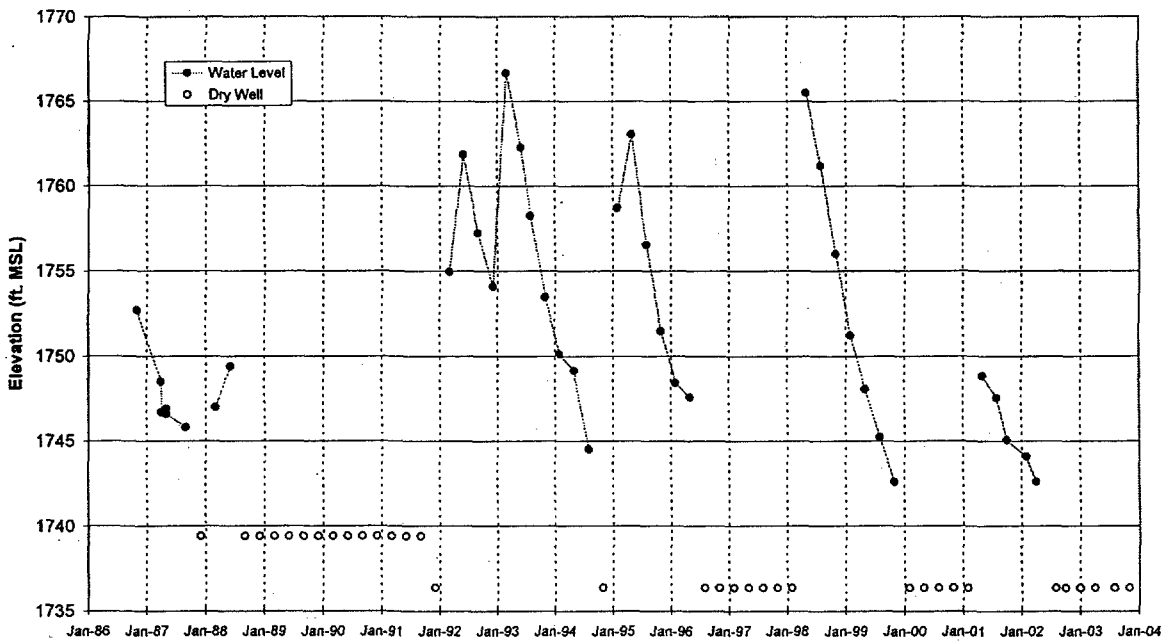
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-16
Figure A-59



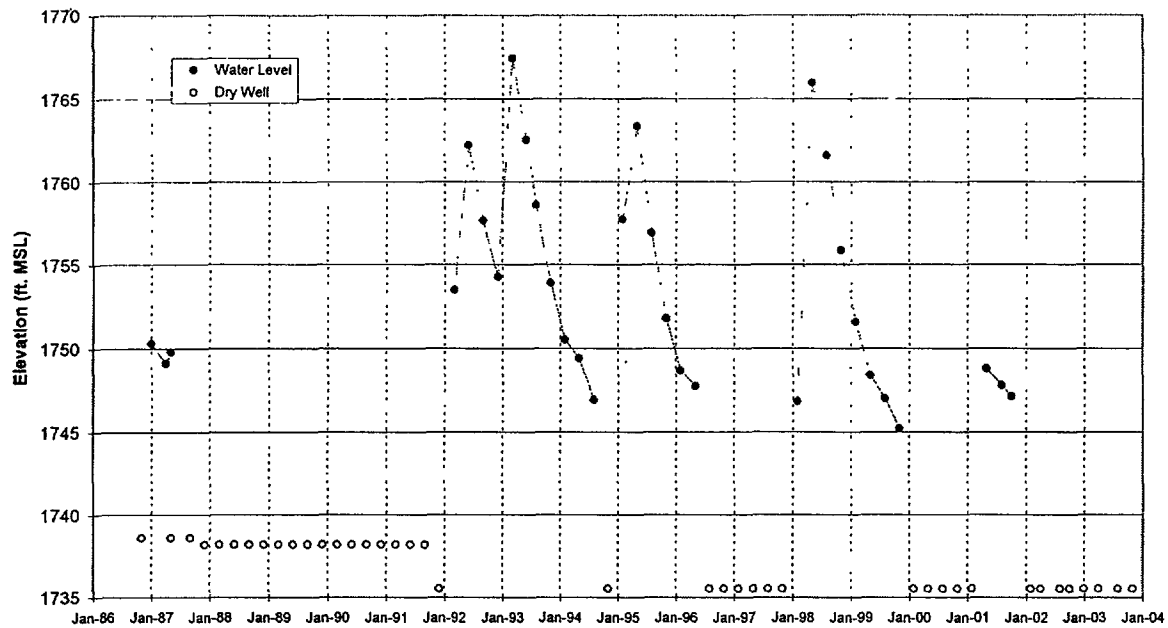
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-17
Figure A-60



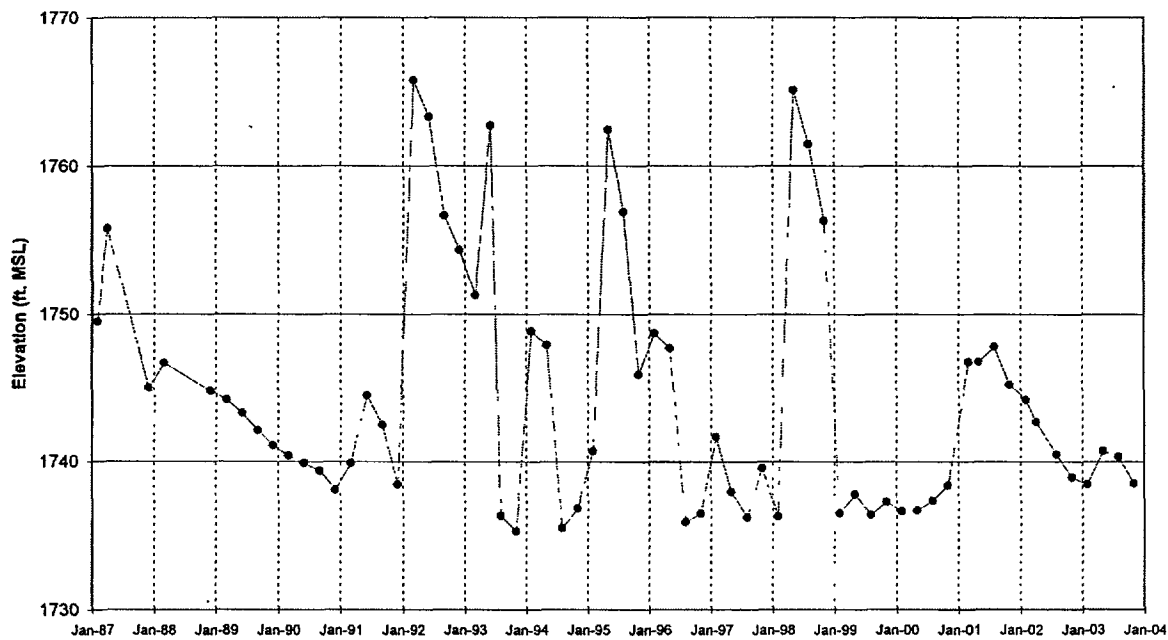
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-18
Figure A-61



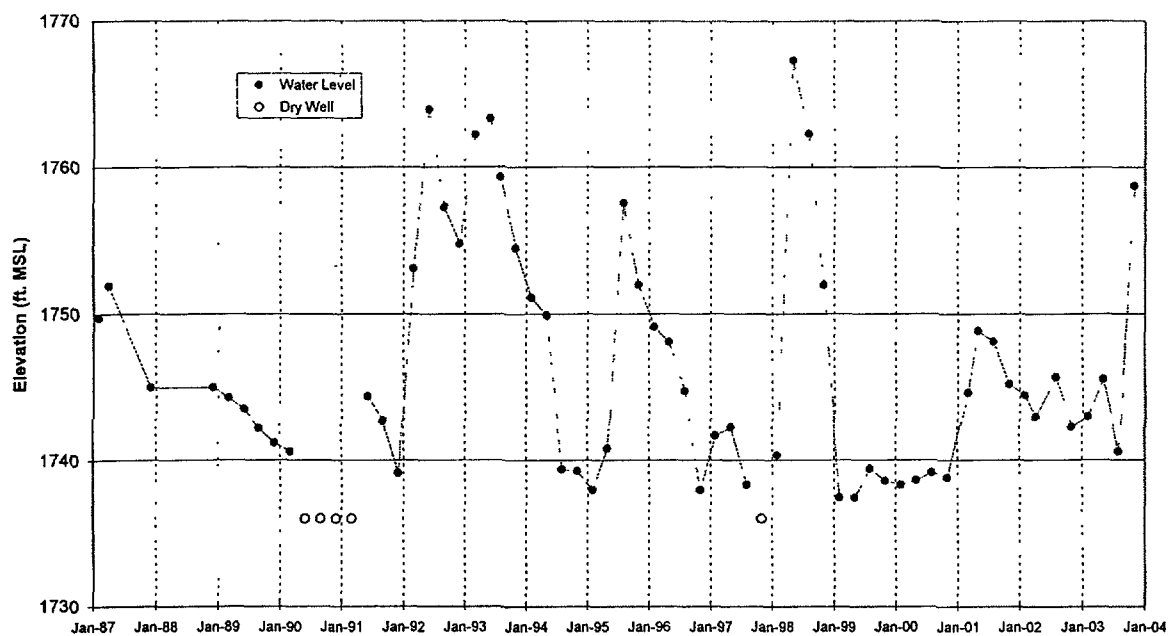
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-19
Figure A-62



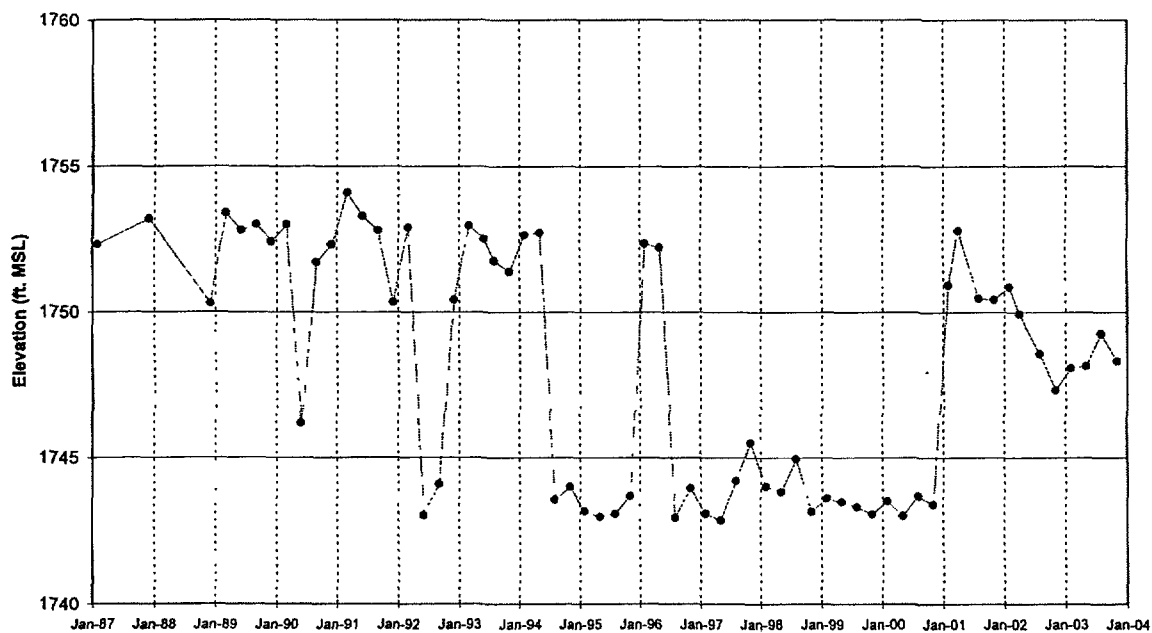
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-20
Figure A-63



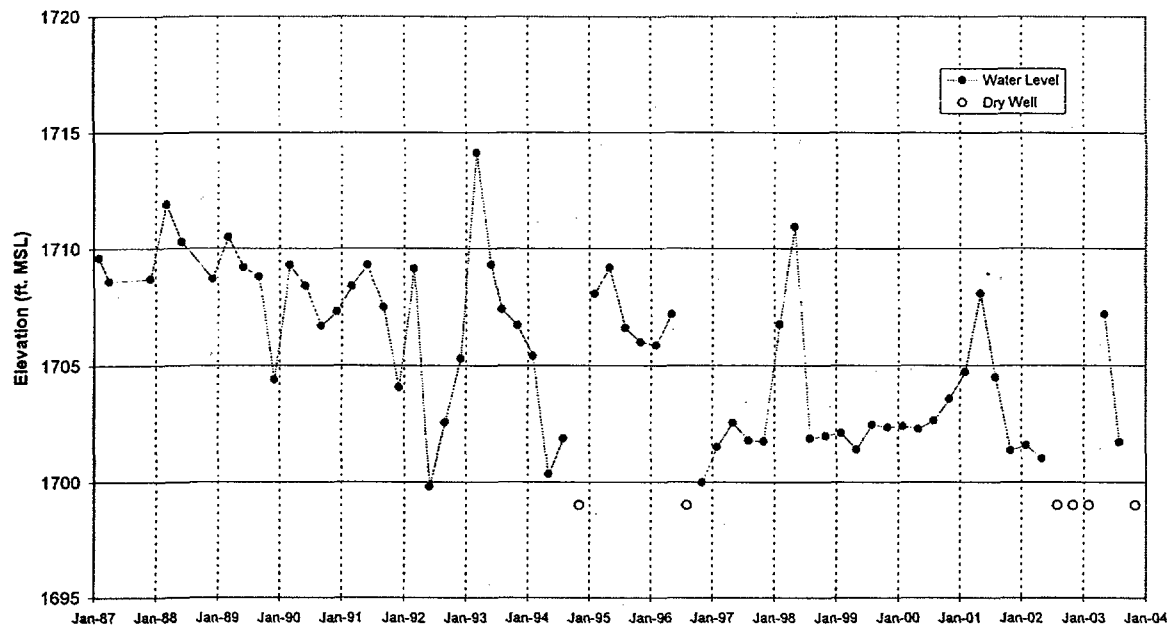
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-21
Figure A-64



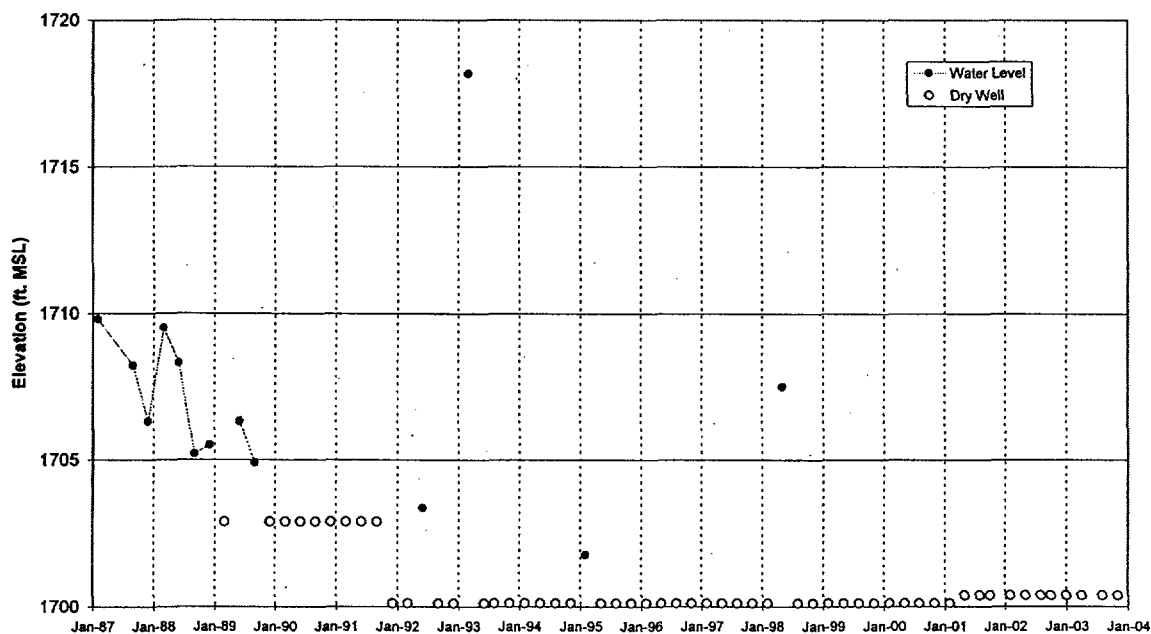
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-22
Figure A-65



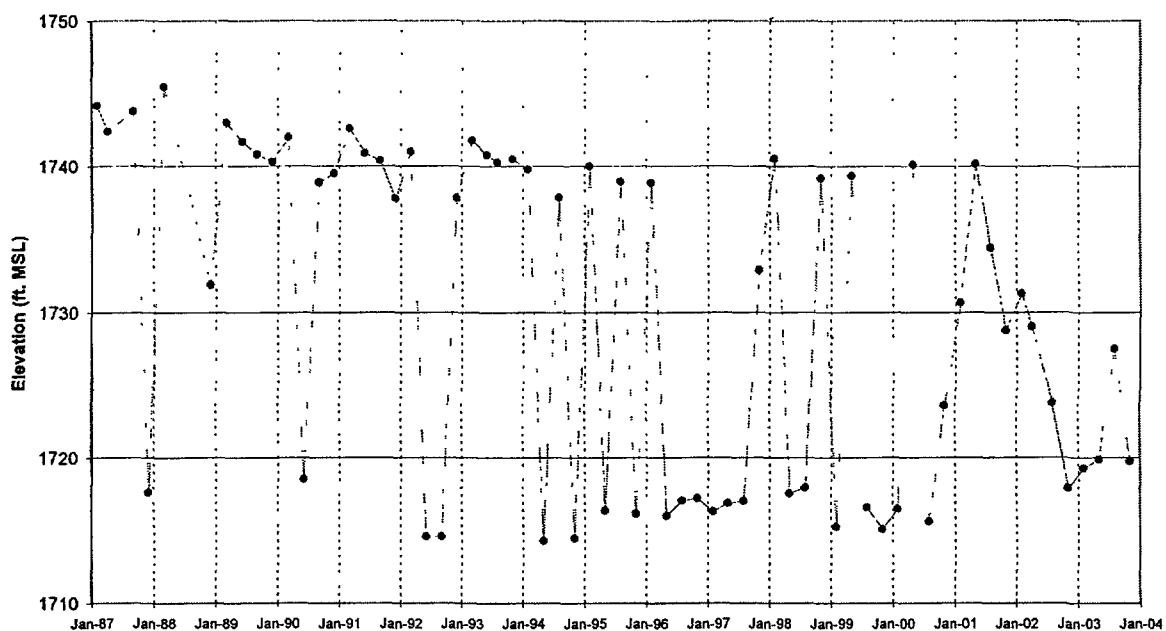
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-23
Figure A-66



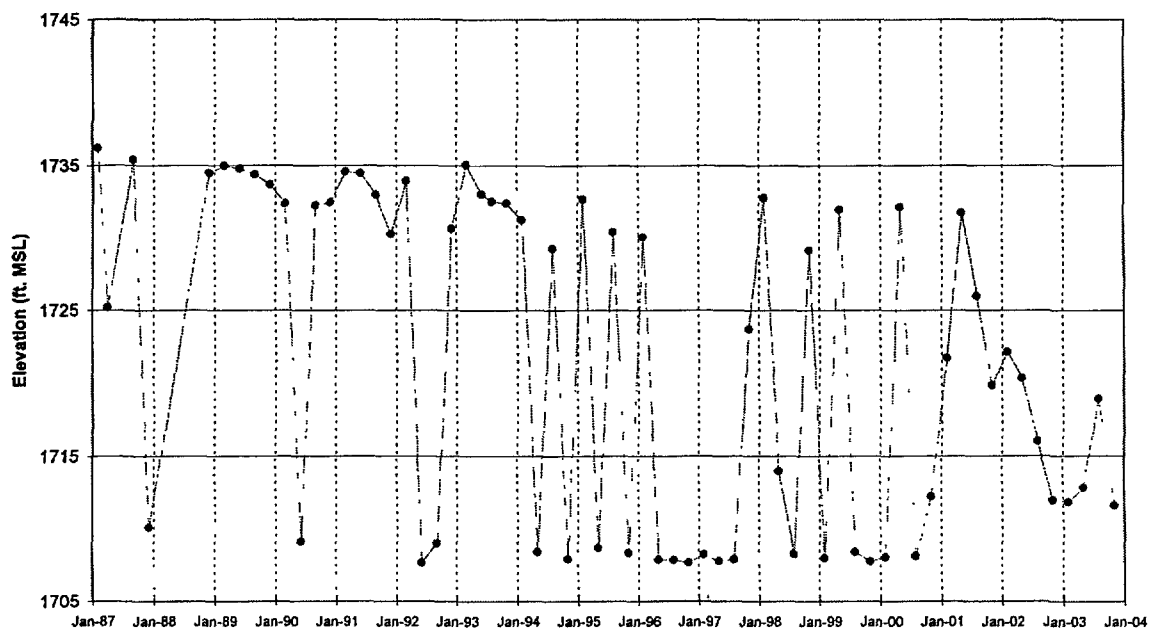
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-24
Figure A-67



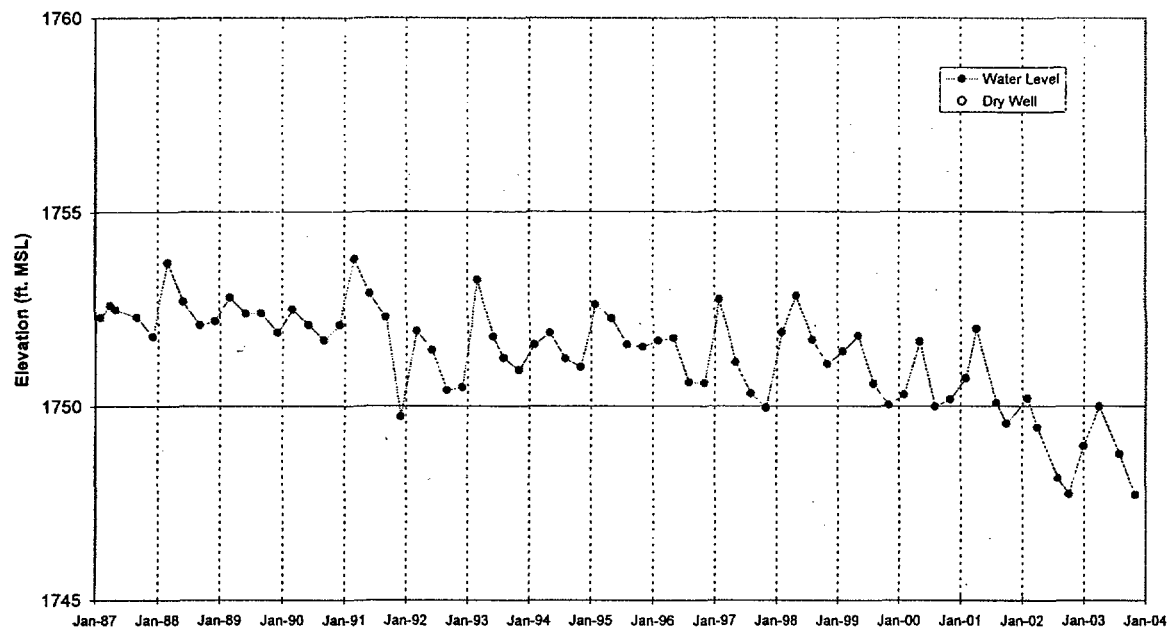
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-25
Figure A-68



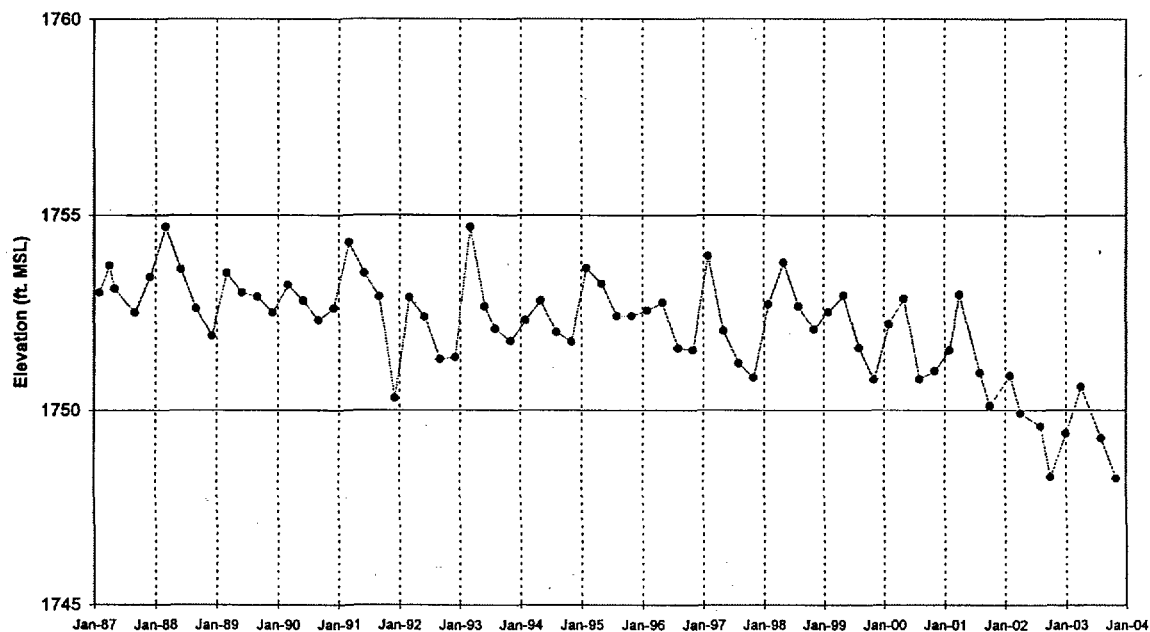
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-26
Figure A-69



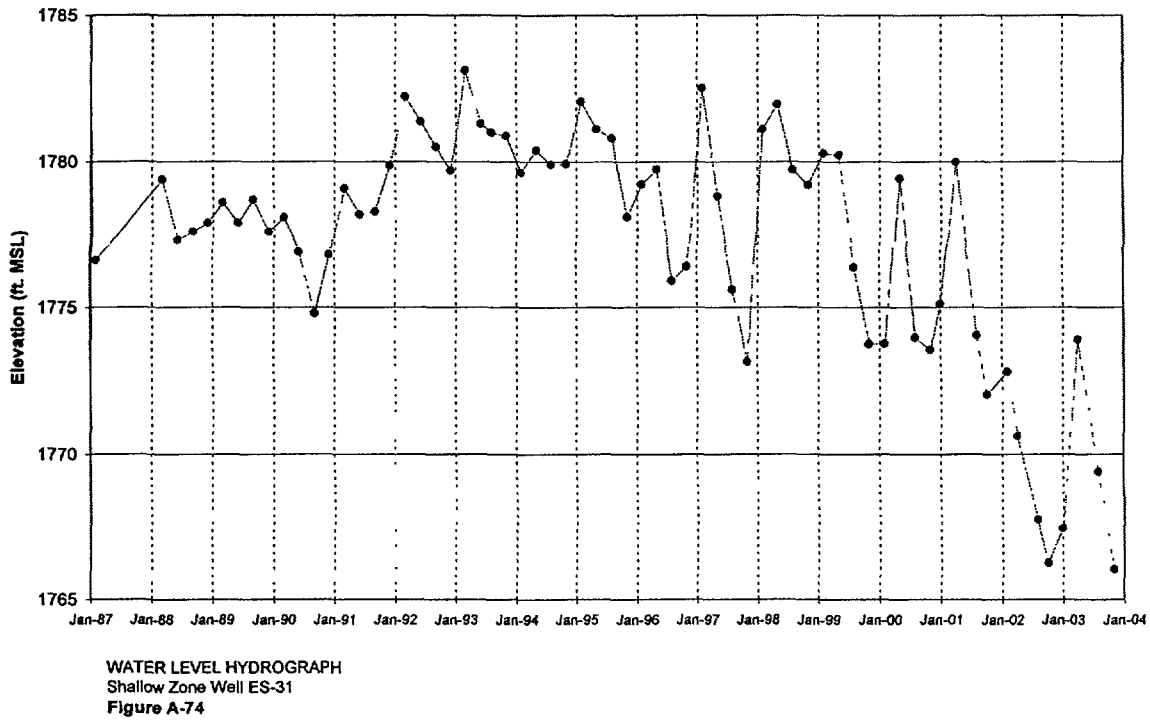
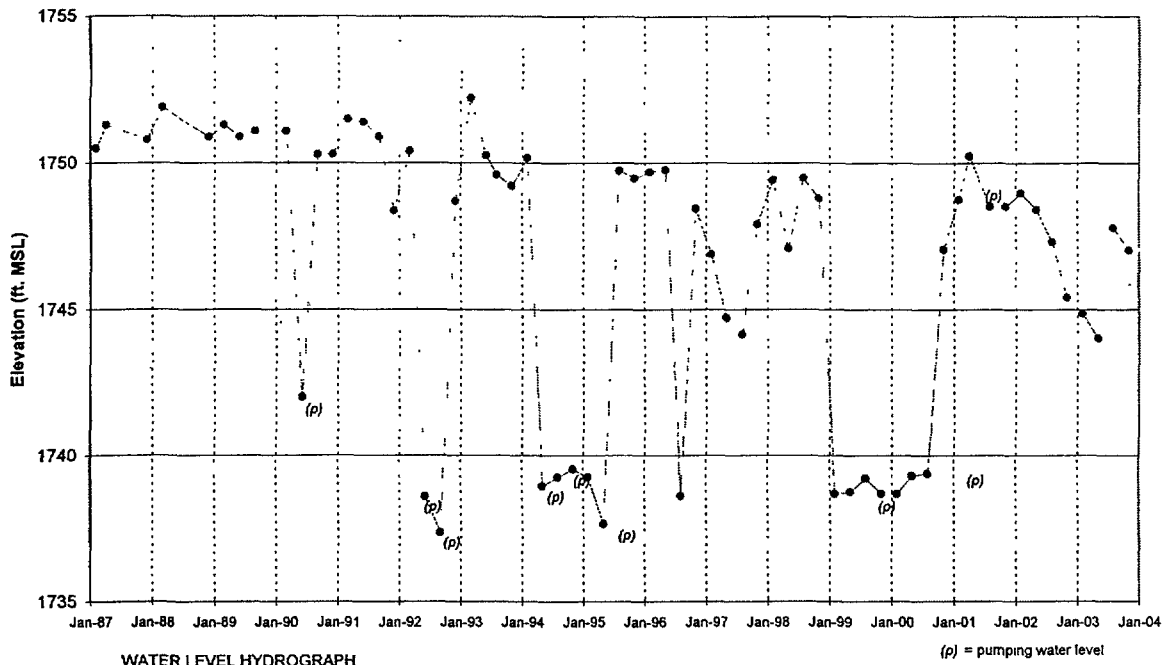
WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-27
Figure A-70

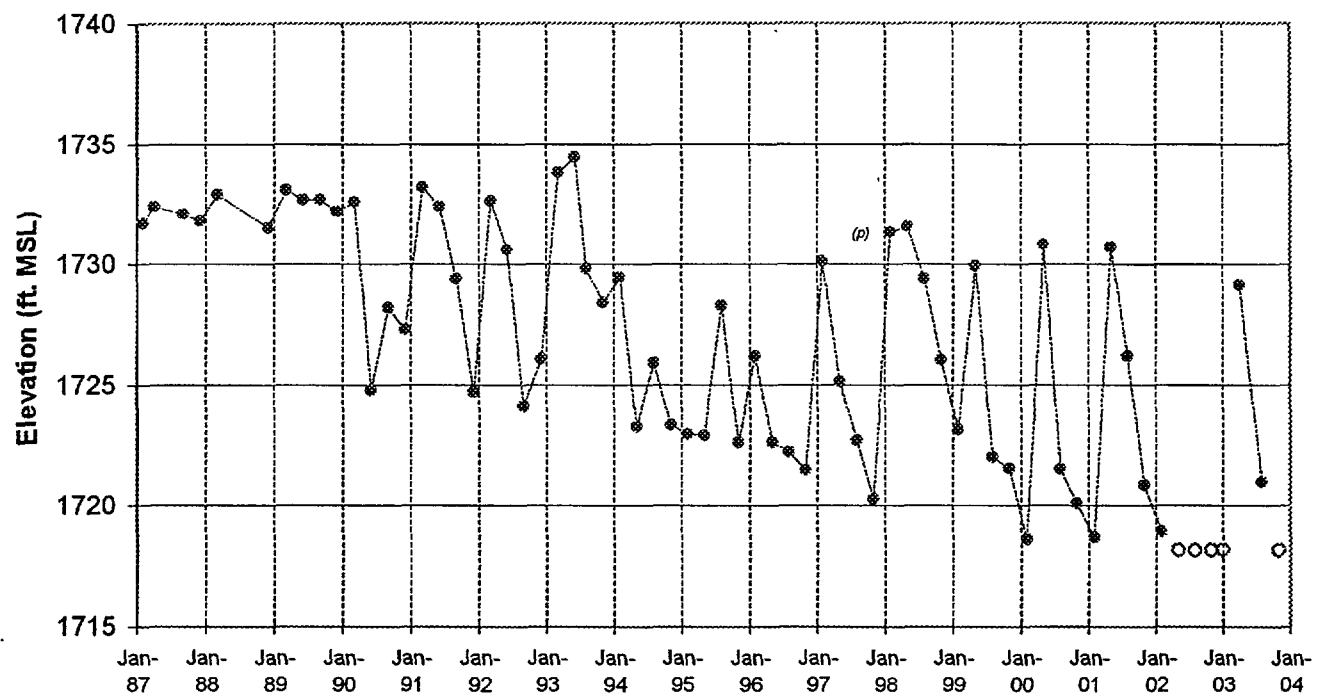


WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-28
Figure A-71



WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-29
Figure A-72

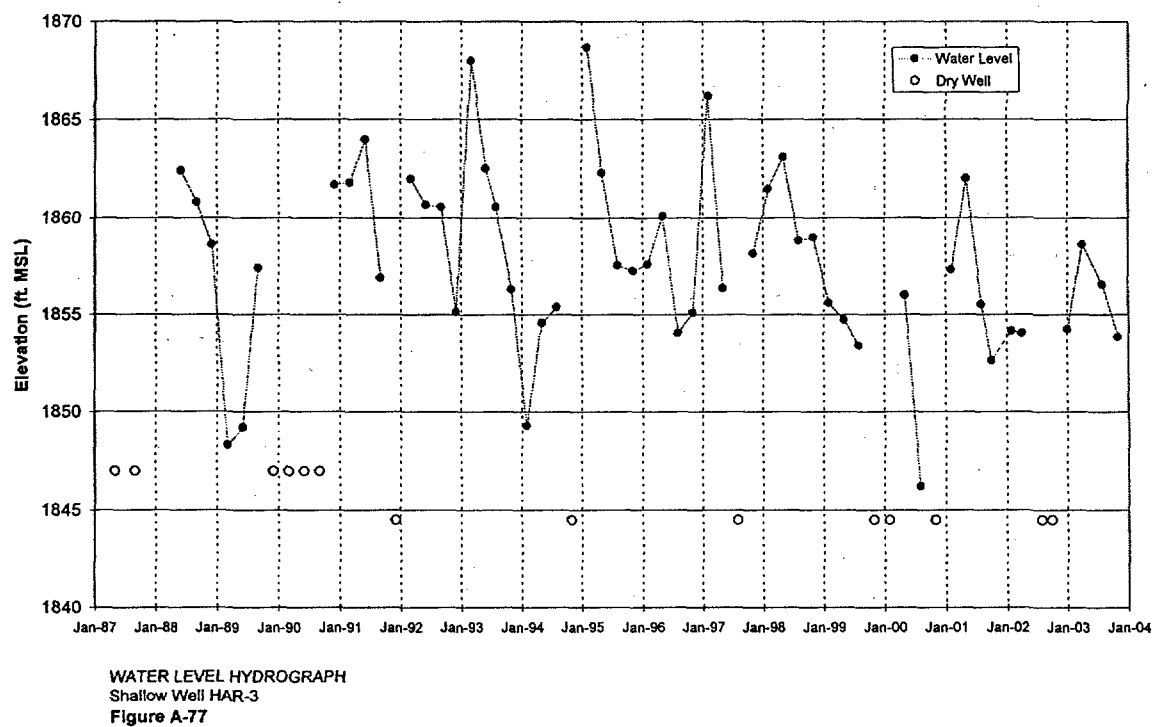
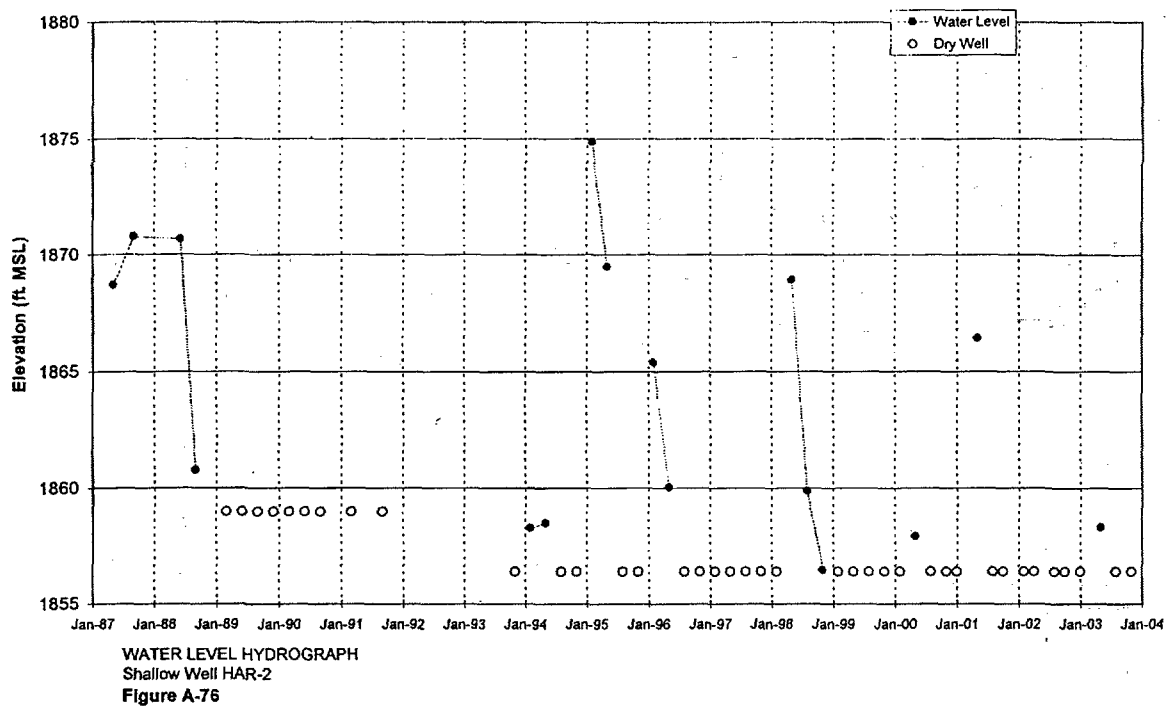


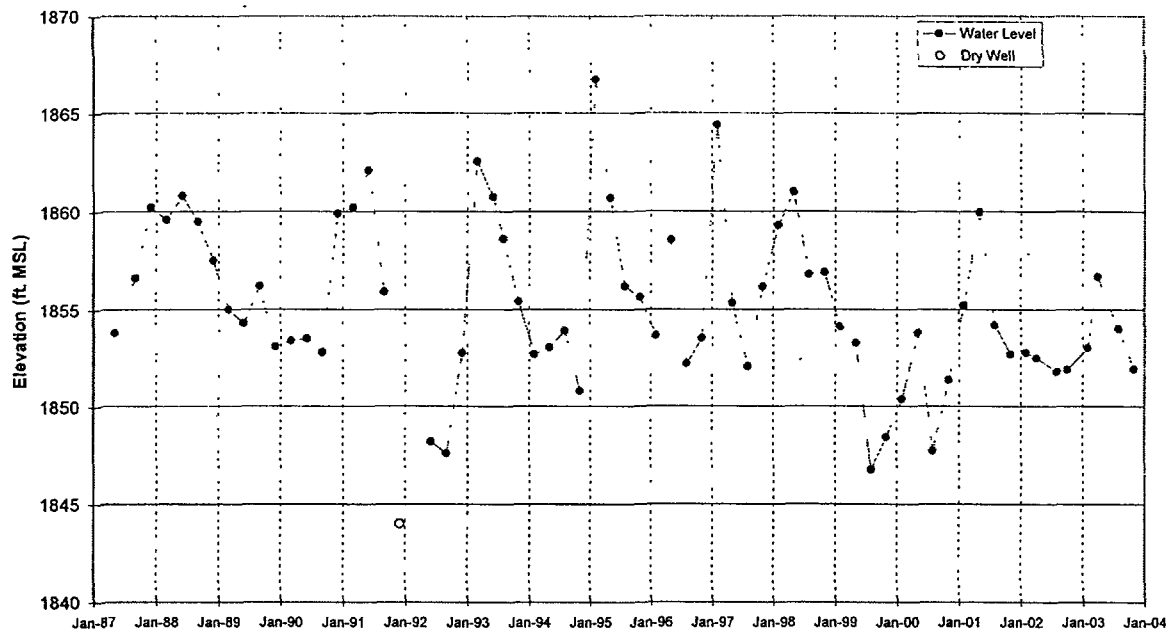


WATER LEVEL HYDROGRAPH
Shallow Zone Well ES-32

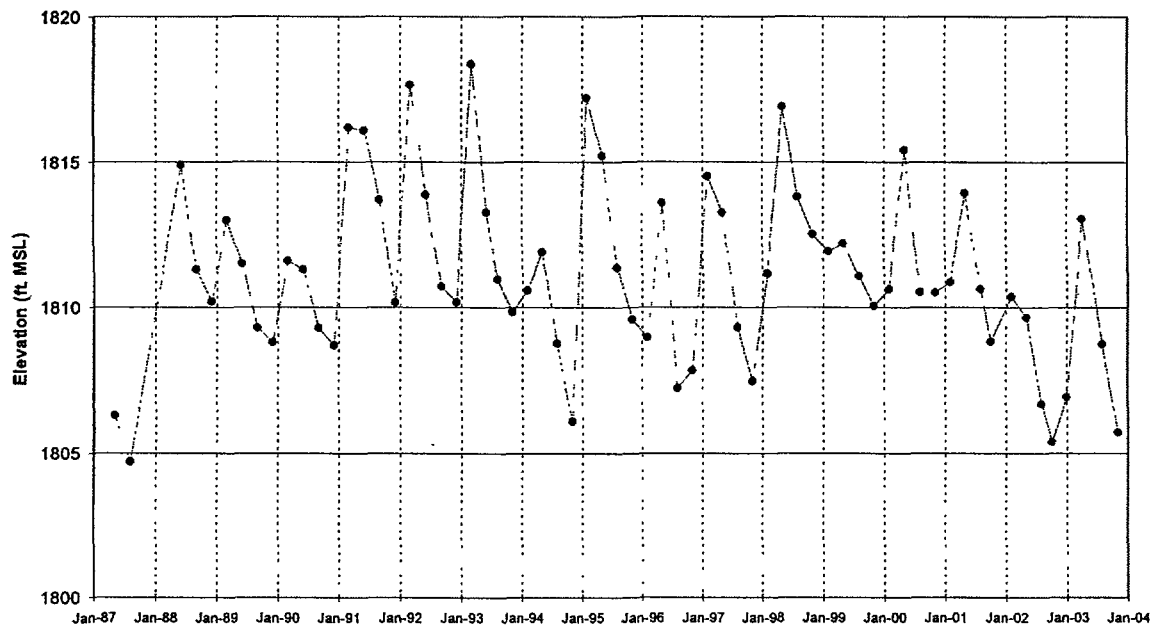
Figure A-75

(p) = pumping water level

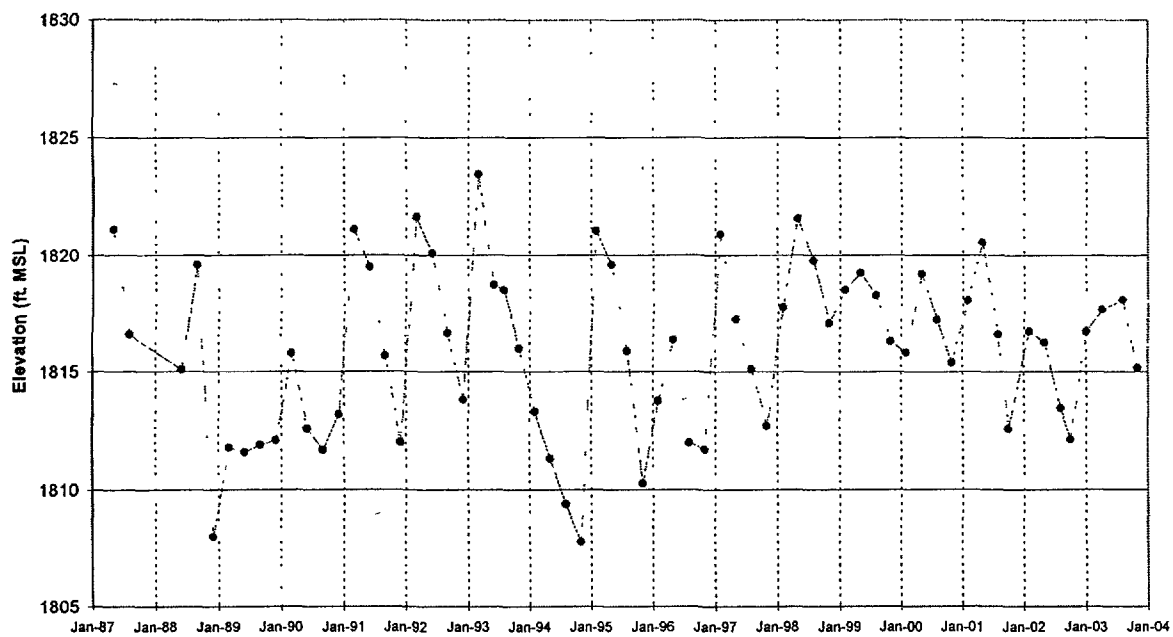




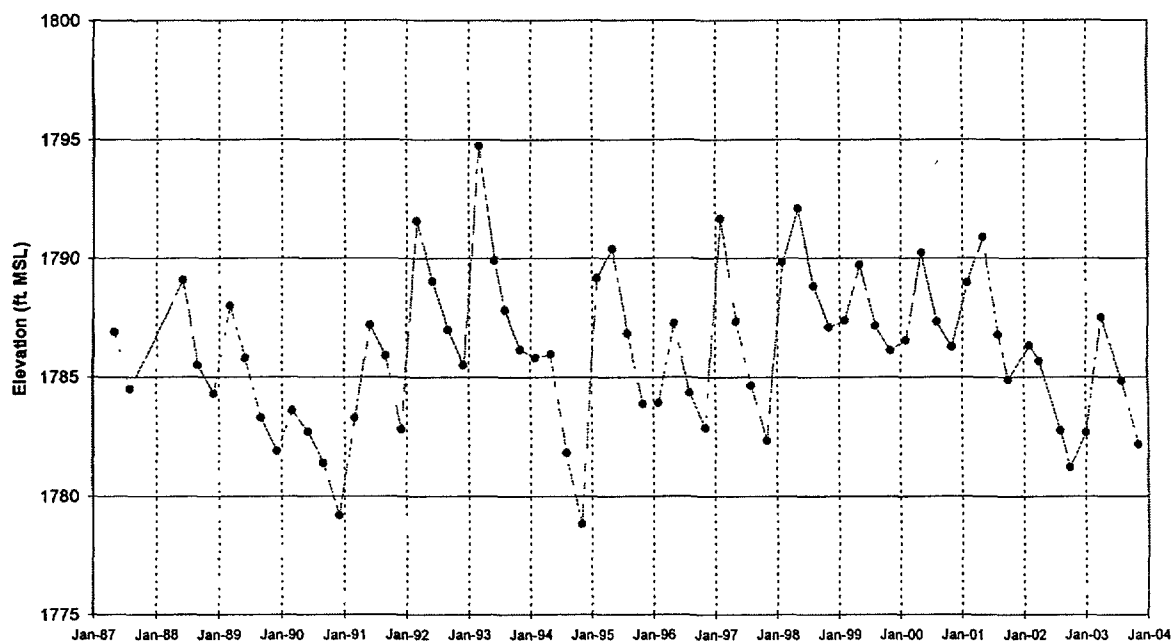
WATER LEVEL HYDROGRAPH
Shallow Well HAR-4
Figure A-78



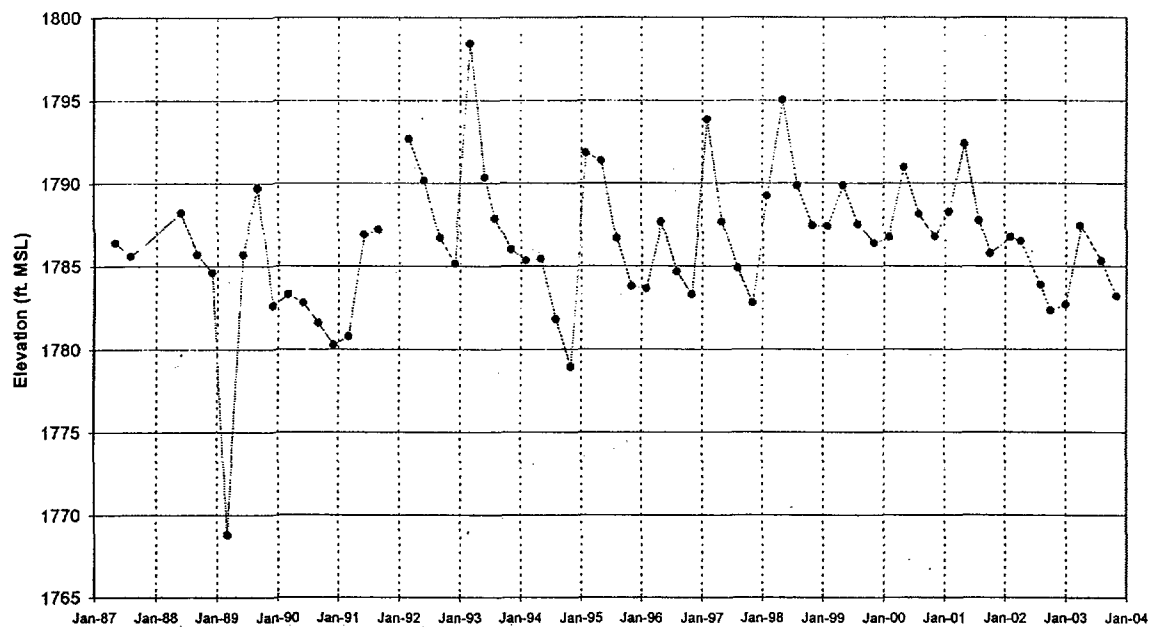
WATER LEVEL HYDROGRAPH
Shallow Well HAR-9
Figure A-79



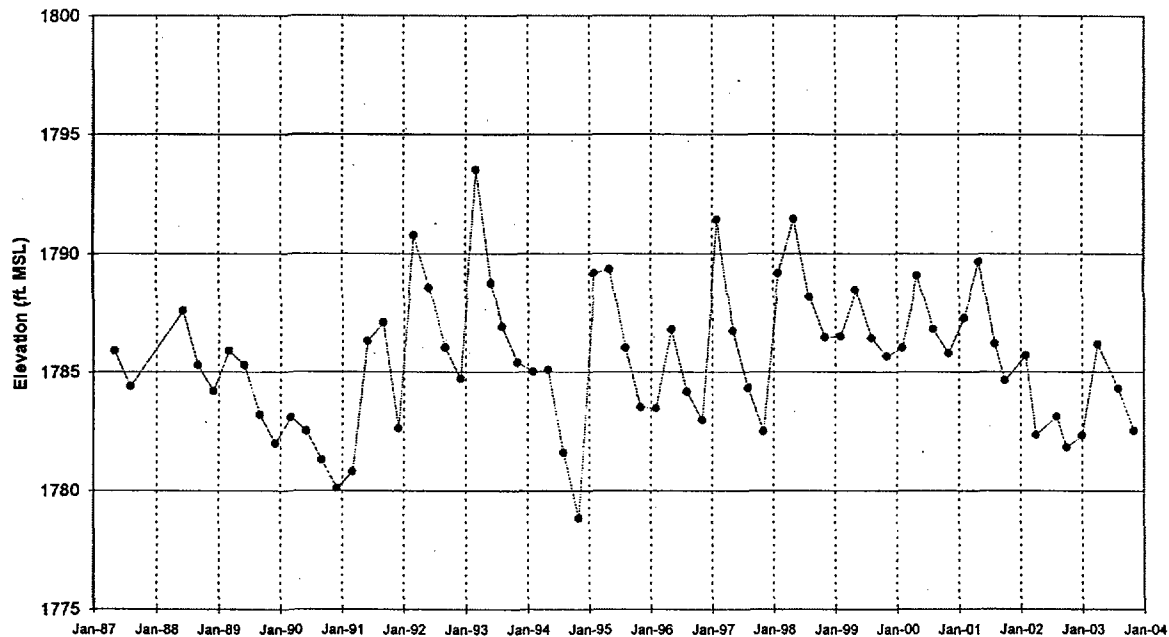
WATER LEVEL HYDROGRAPH
Shallow Well HAR-11
Figure A-80



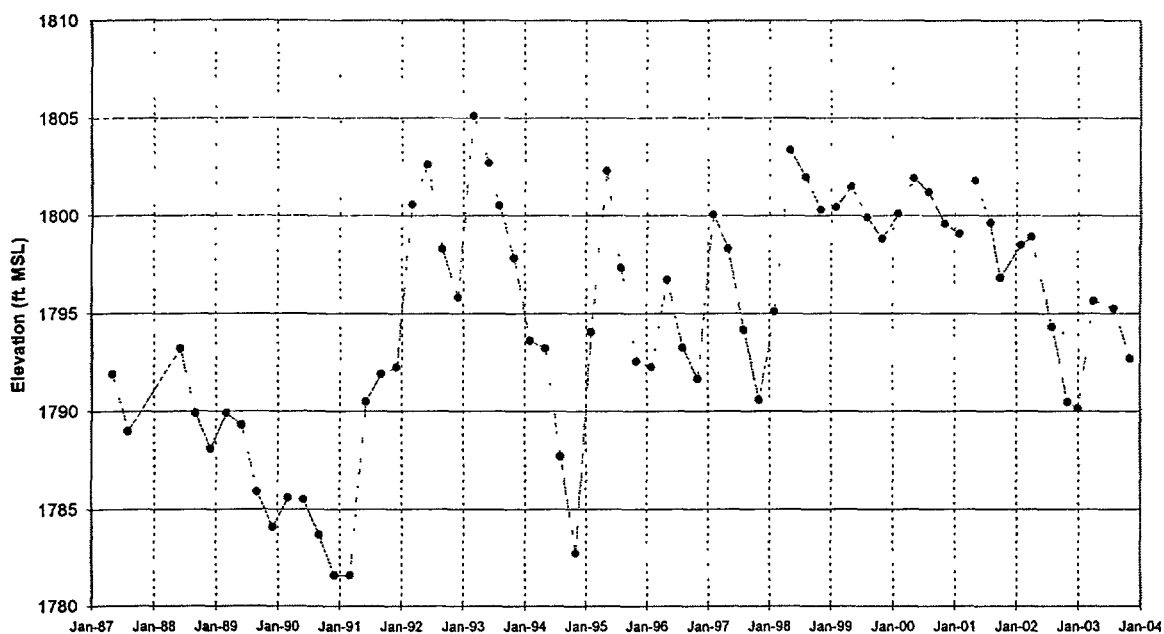
WATER LEVEL HYDROGRAPH
Shallow Well HAR-12
Figure A-81



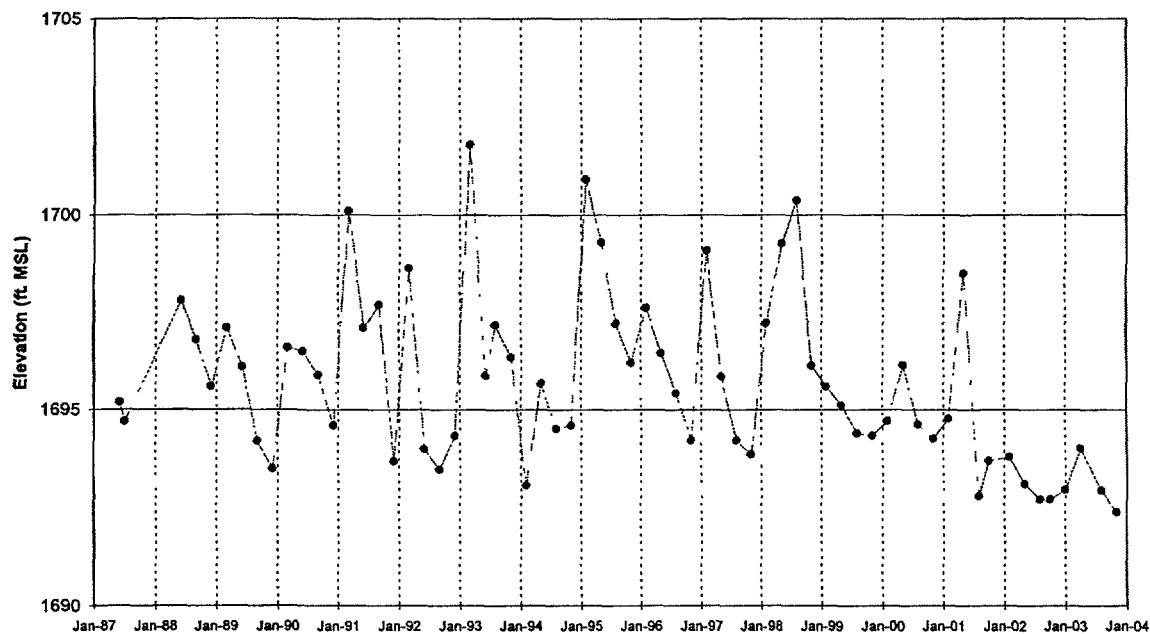
WATER LEVEL HYDROGRAPH
Shallow Well HAR-13
Figure A-82



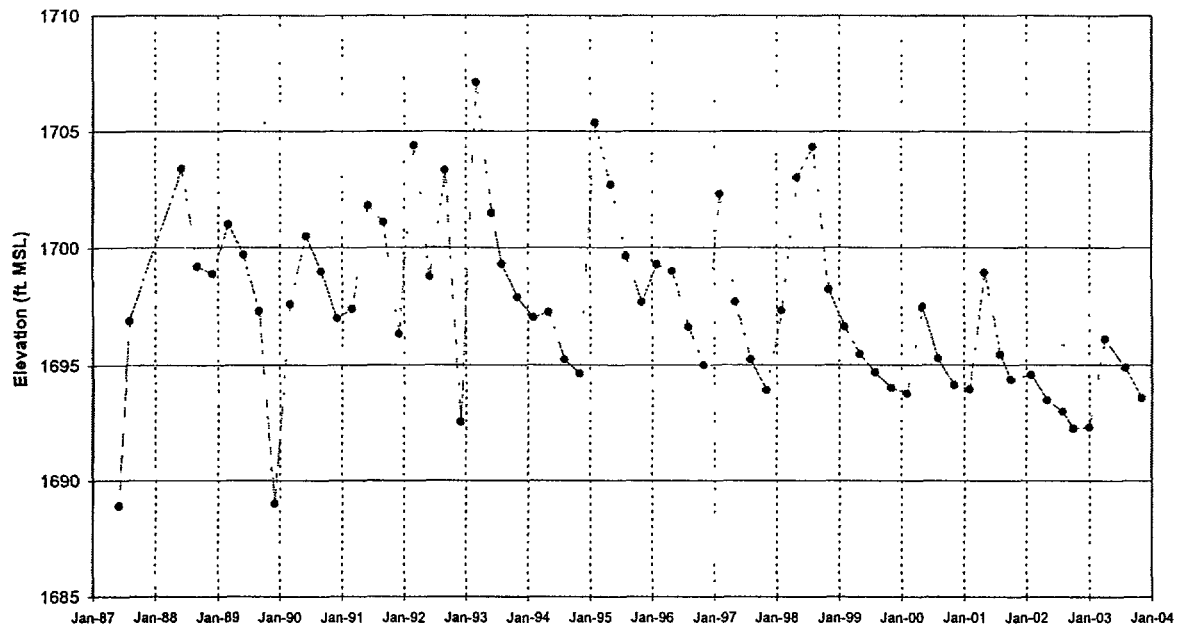
WATER LEVEL HYDROGRAPH
Shallow Well HAR-14
Figure A-83



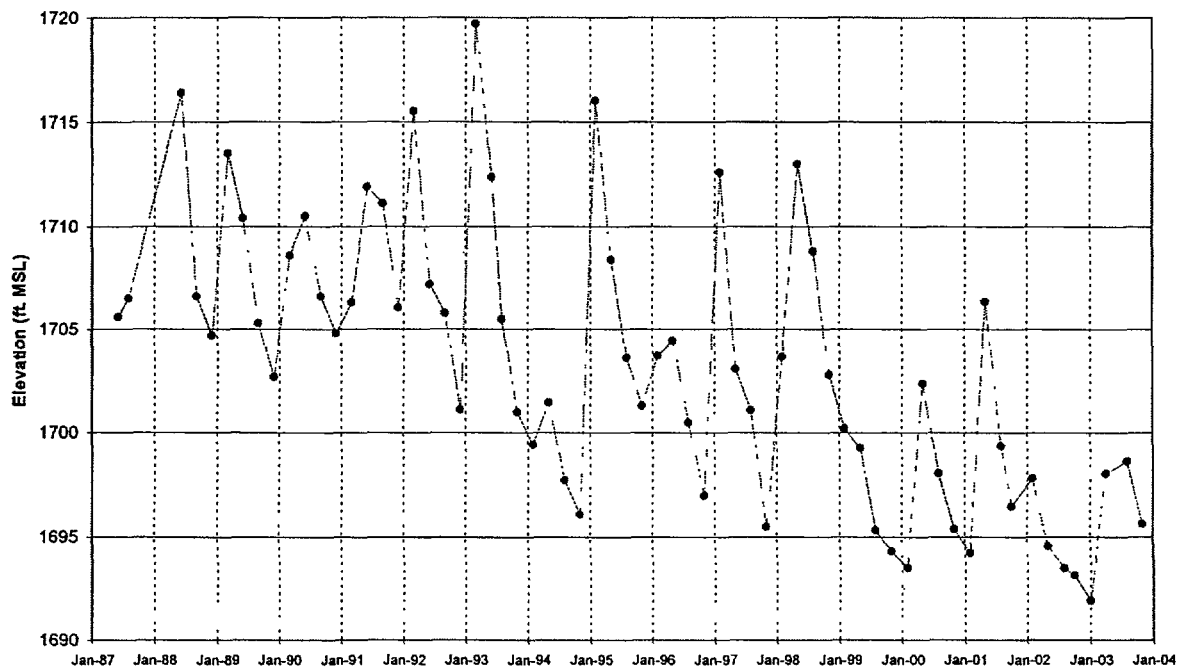
WATER LEVEL HYDROGRAPH
Shallow Well HAR-15
Figure A-84



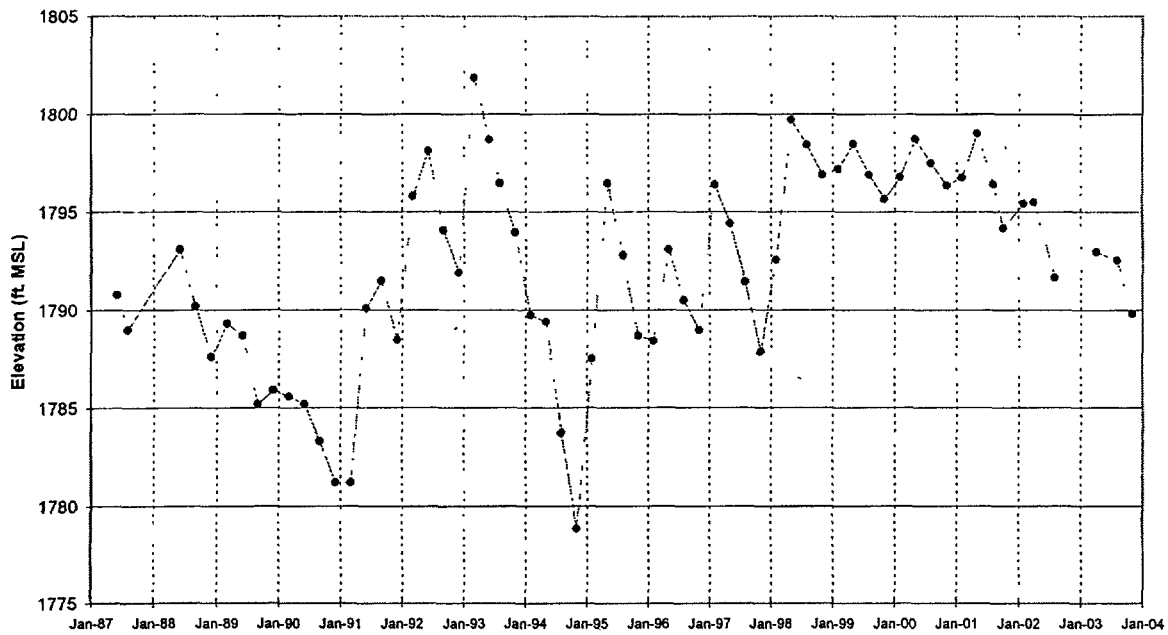
WATER LEVEL HYDROGRAPH
Shallow Well HAR-27
Figure A-85



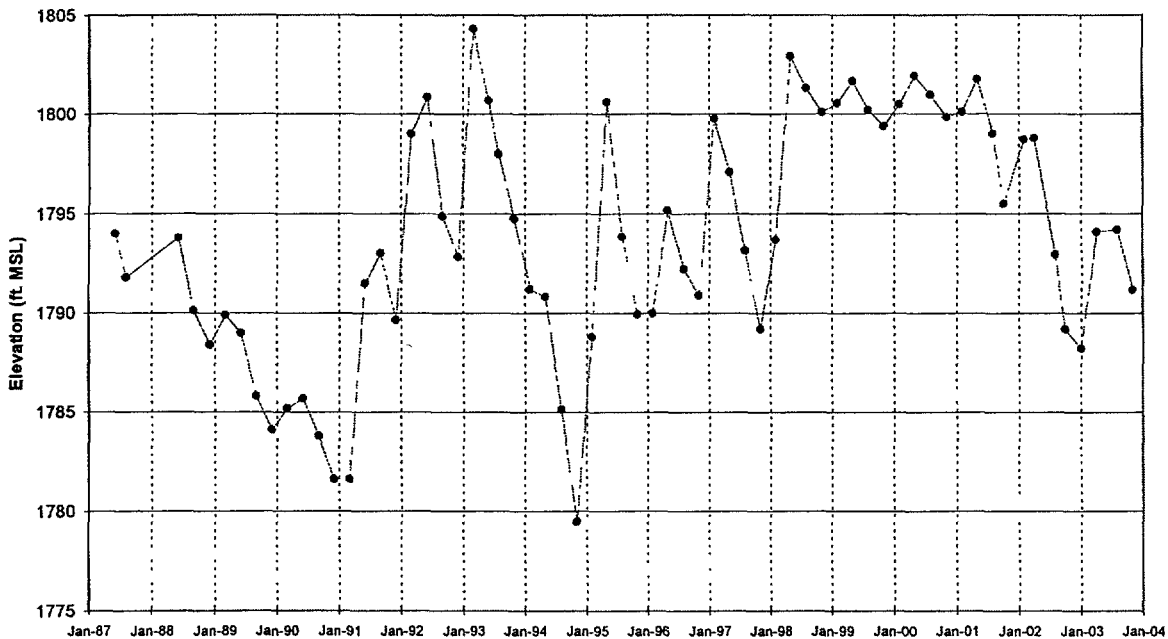
WATER LEVEL HYDROGRAPH
Shallow Well HAR-28
Figure A-86



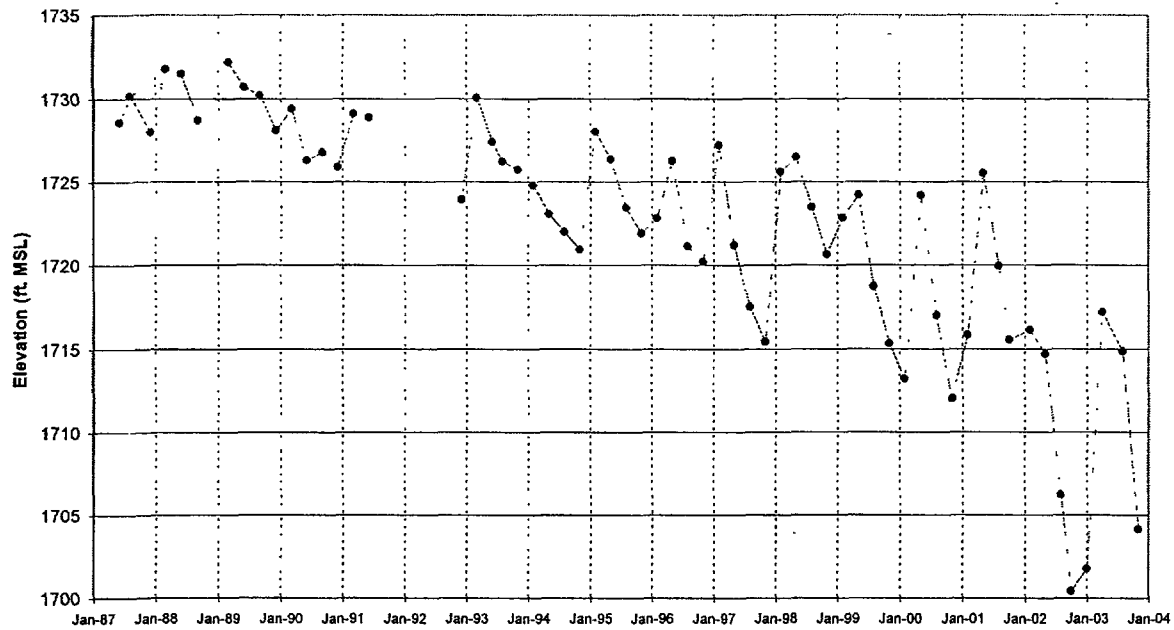
WATER LEVEL HYDROGRAPH
Shallow Well HAR-29
Figure A-87



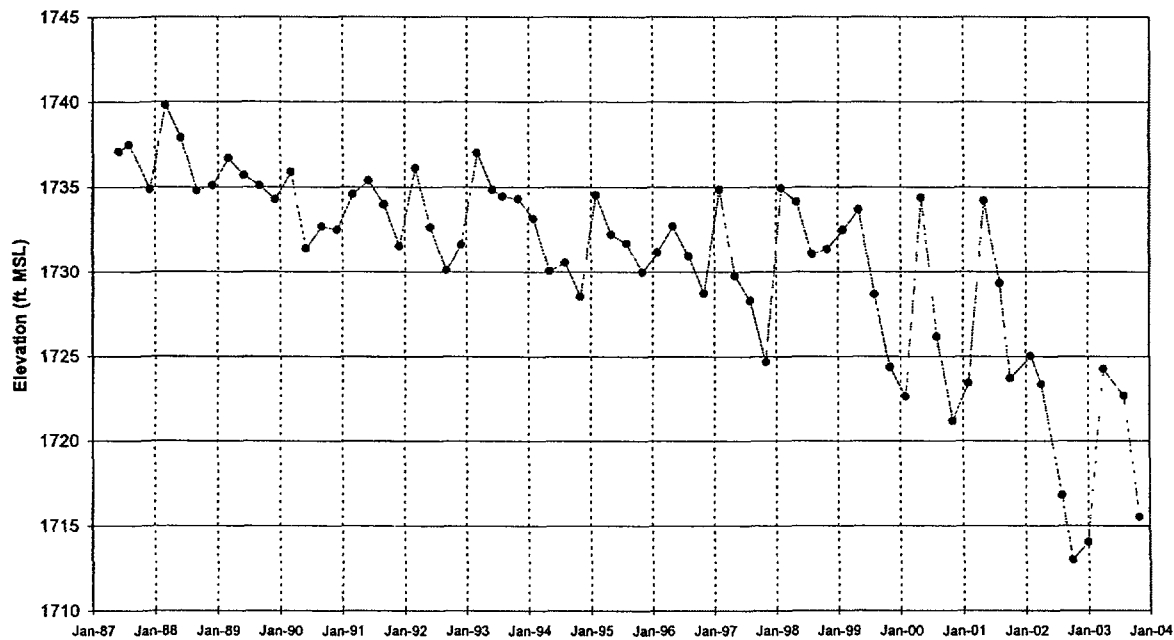
WATER LEVEL HYDROGRAPH
Shallow Well HAR-30
Figure A-88



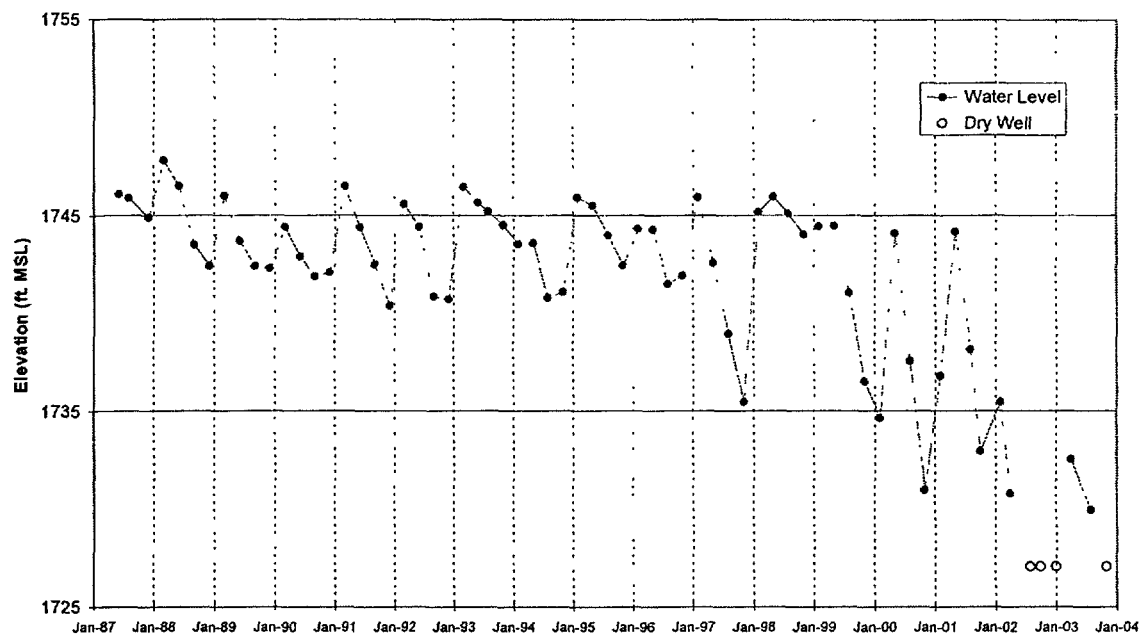
WATER LEVEL HYDROGRAPH
Shallow Well HAR-31
Figure A-89



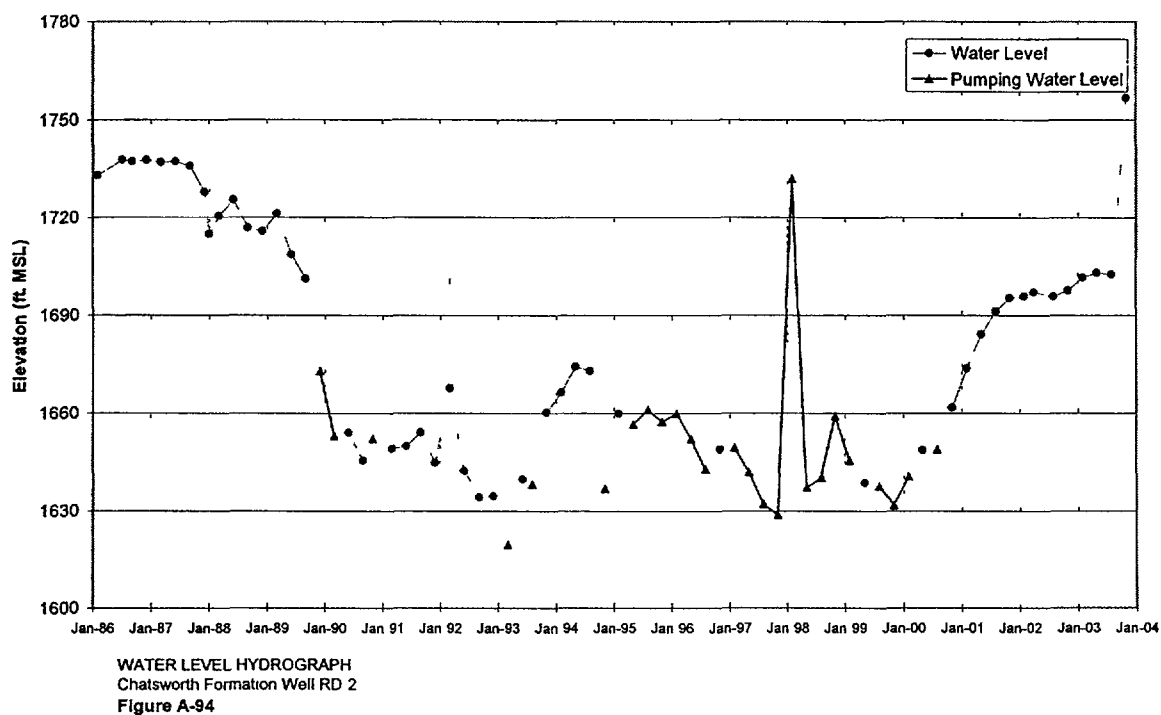
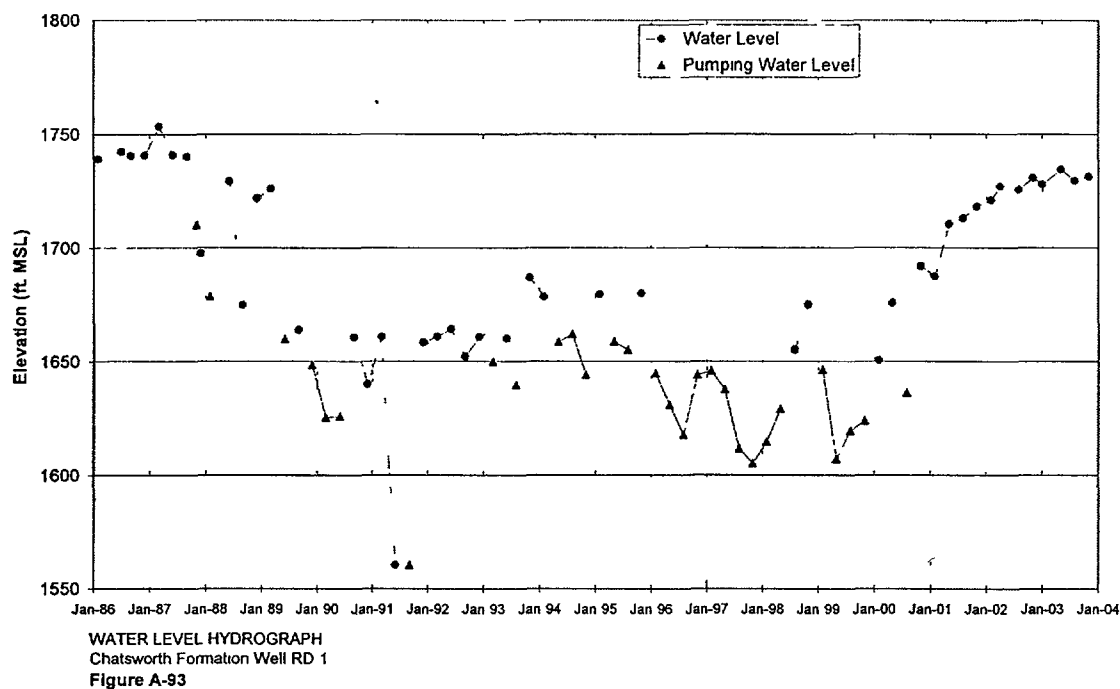
WATER LEVEL HYDROGRAPH
Shallow Well HAR-32
Figure A-90

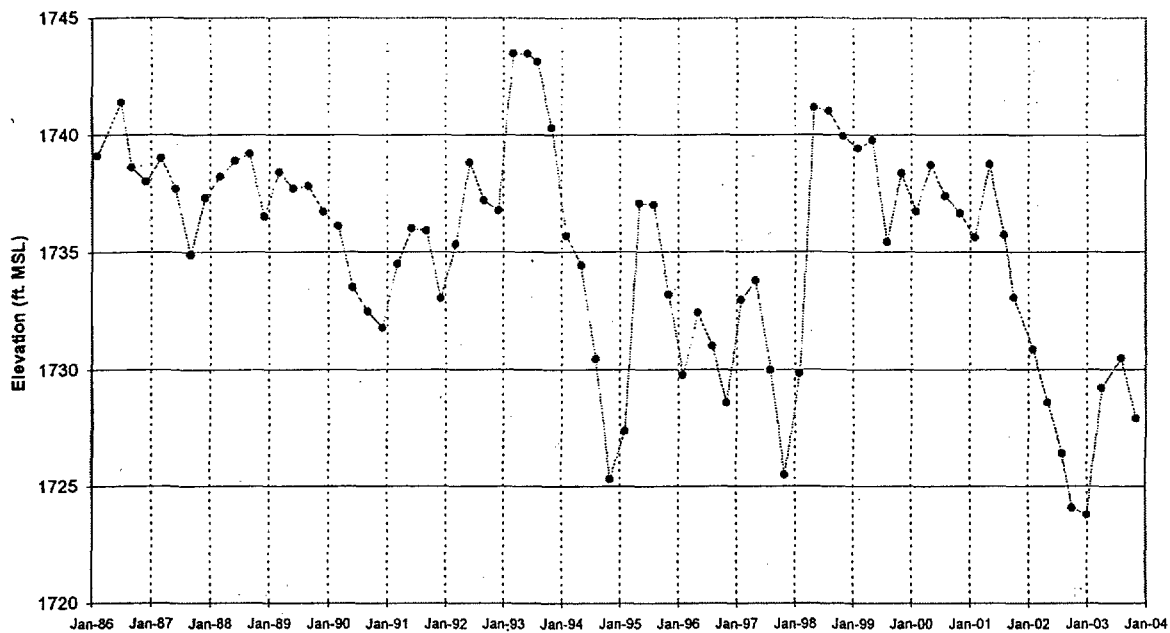


WATER LEVEL HYDROGRAPH
Shallow Well HAR-33
Figure A-91

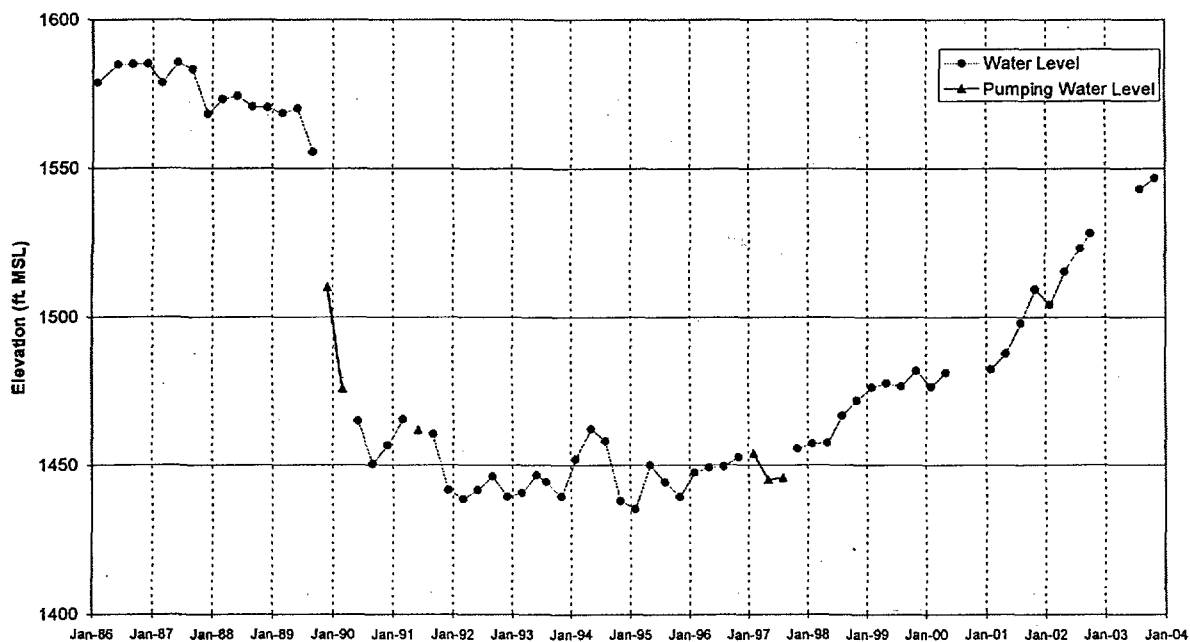


WATER LEVEL HYDROGRAPH
Shallow Well HAR-34
Figure A-92

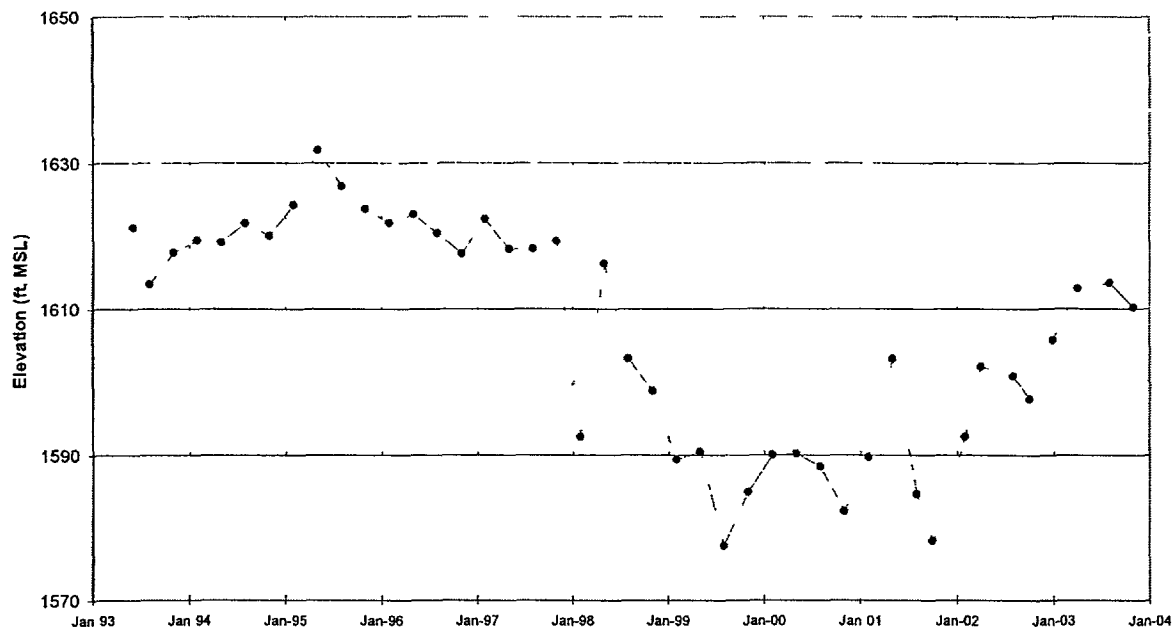




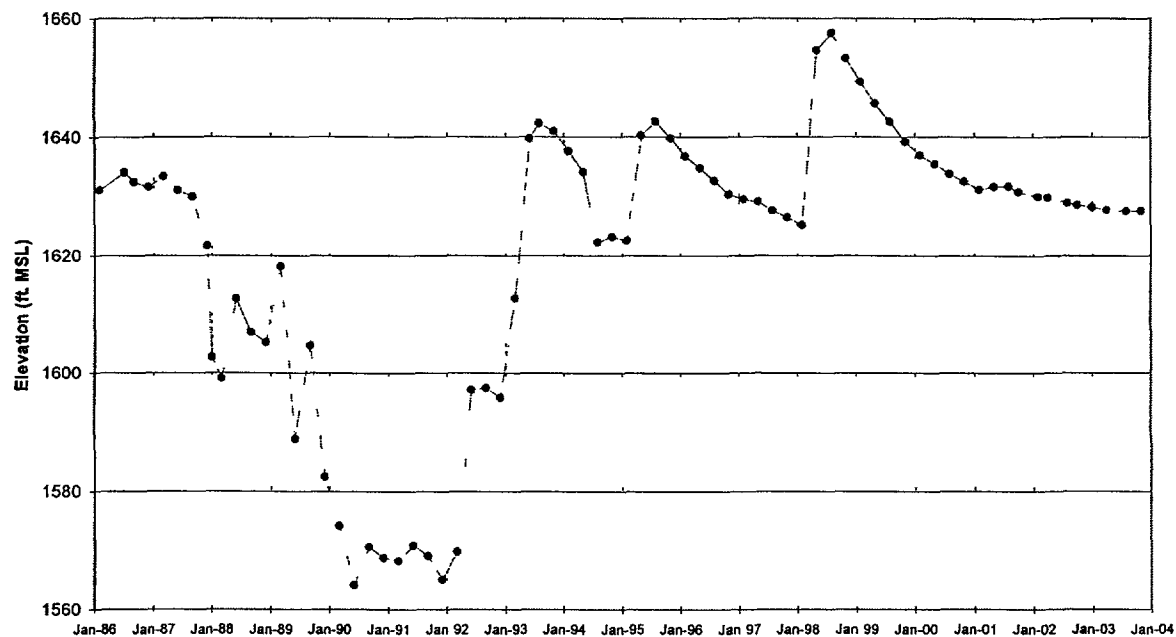
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-3
Figure A-95



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-4
Figure A-96

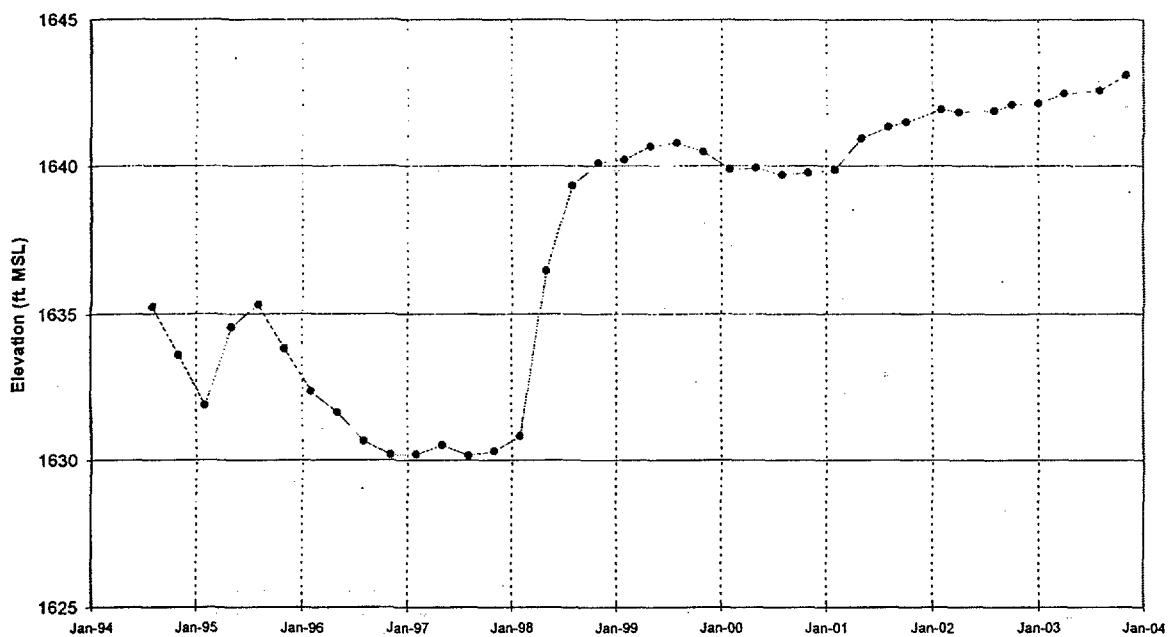


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD 5A
Figure A-97

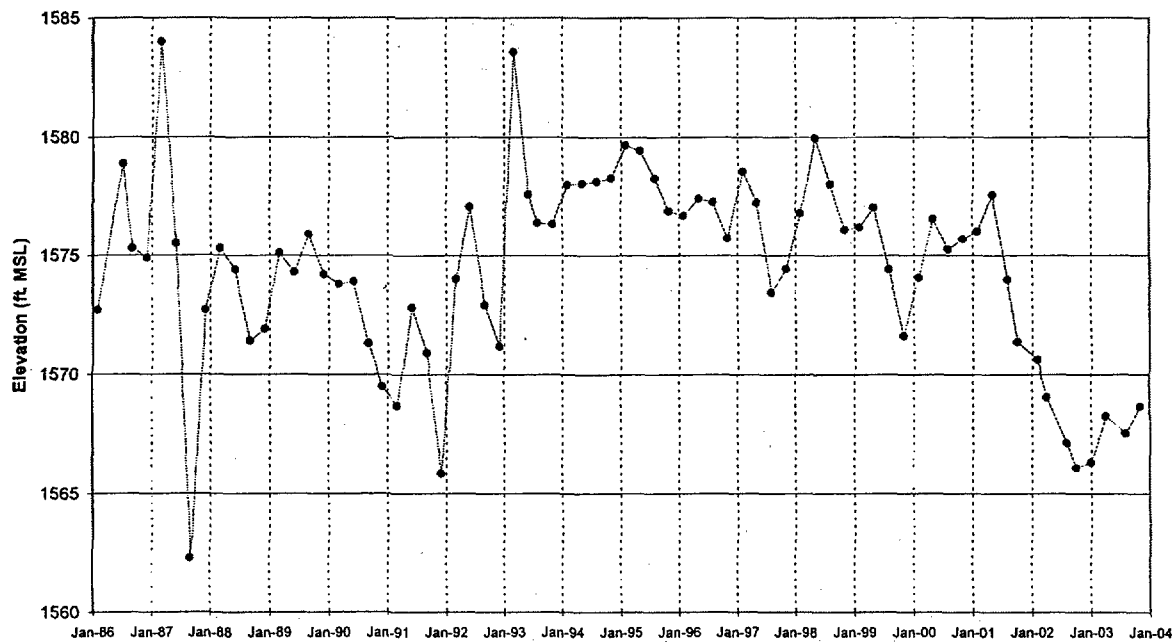


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD 5B*
Figure A-98

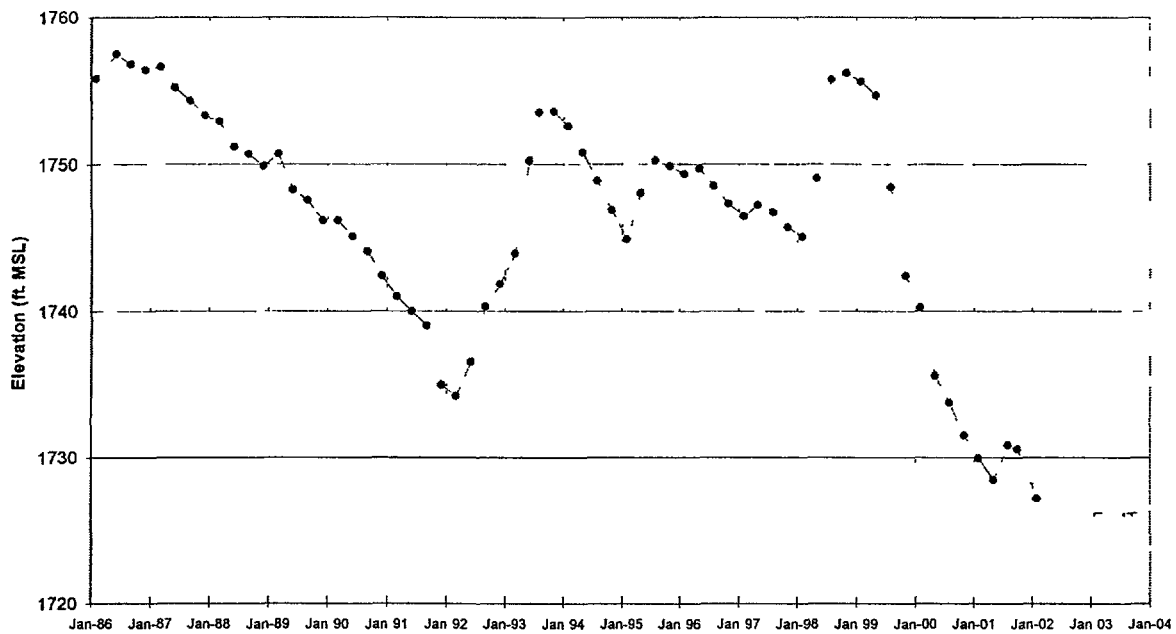
* Well known as RD-5 prior to 05/93



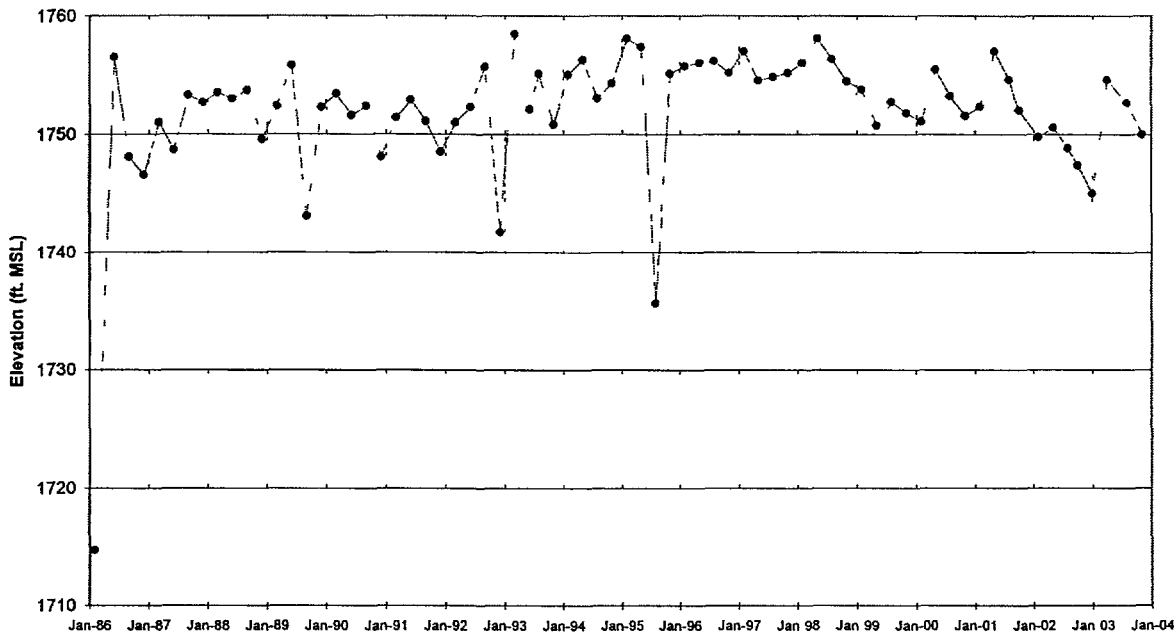
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-5C
Figure A-99



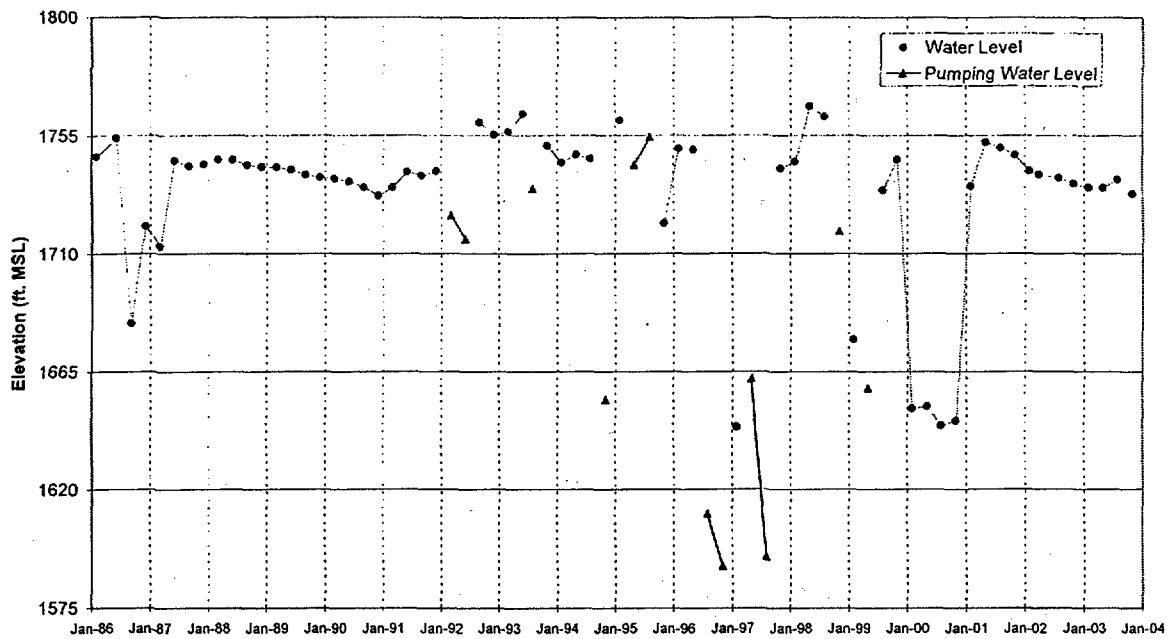
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-6
Figure A-100



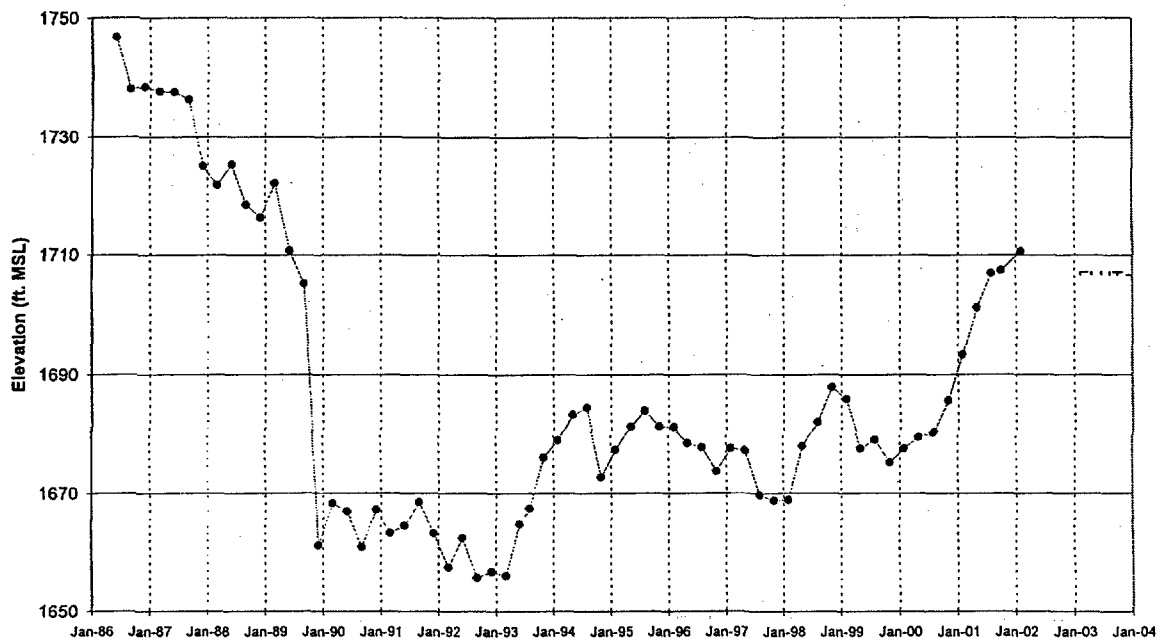
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD 7
Figure A-101



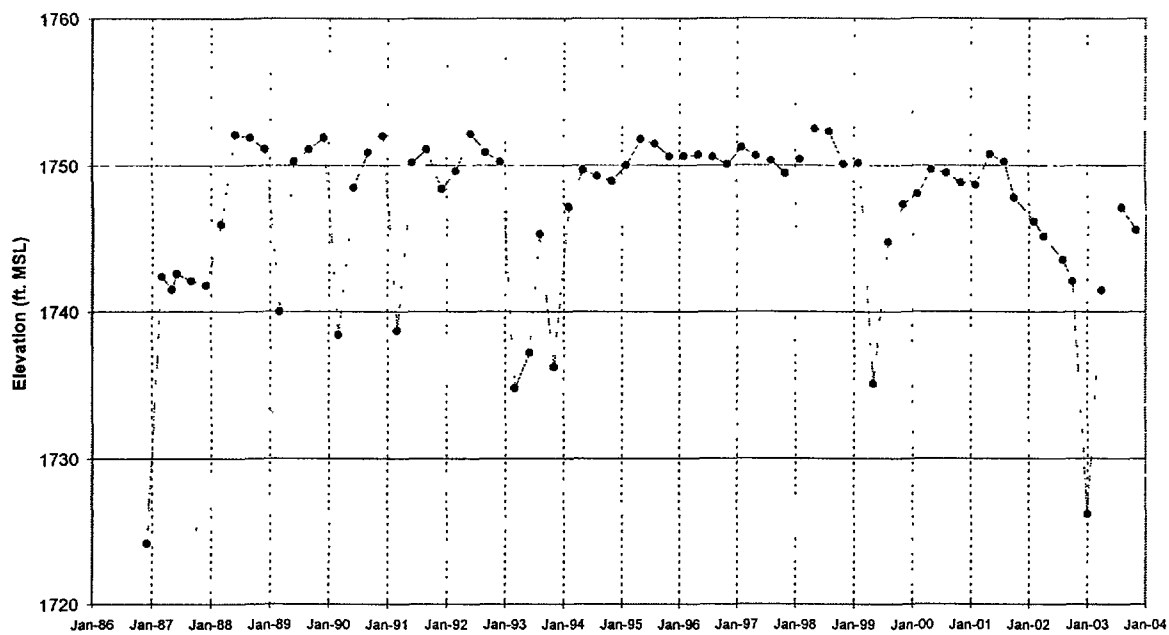
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-8
Figure A-102



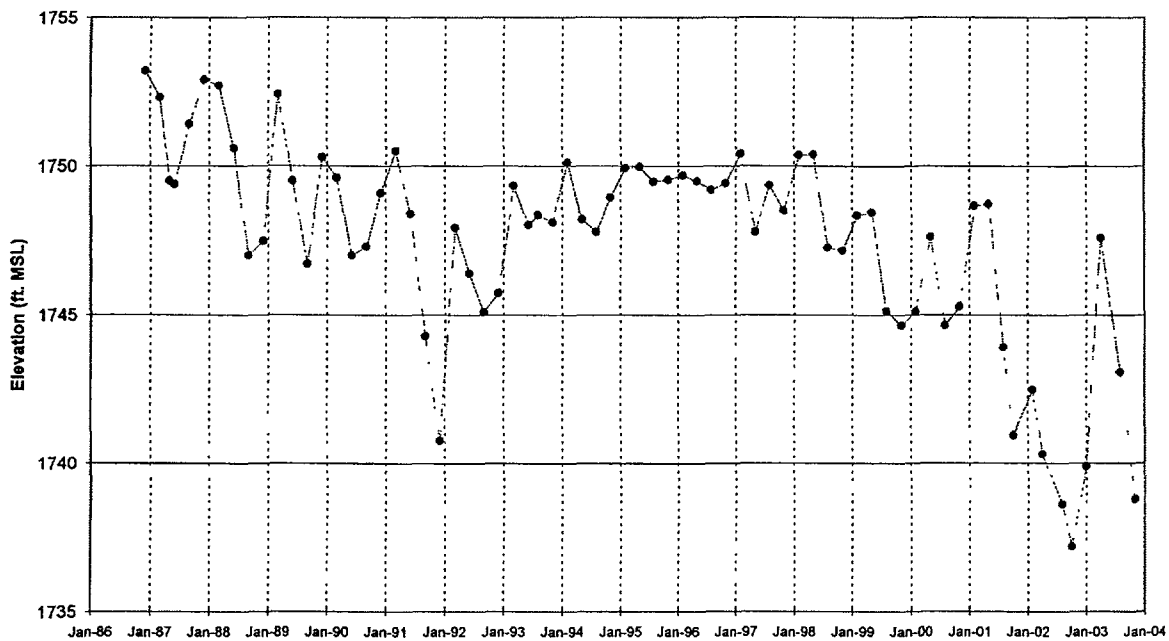
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-9
Figure A-103



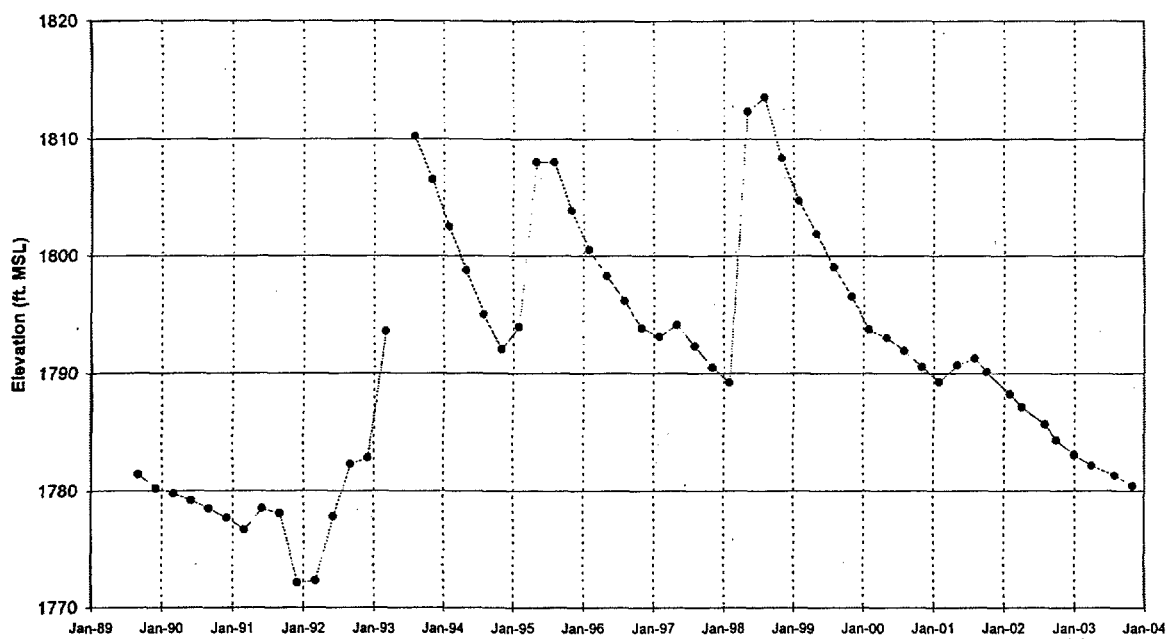
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-10
Figure A-104



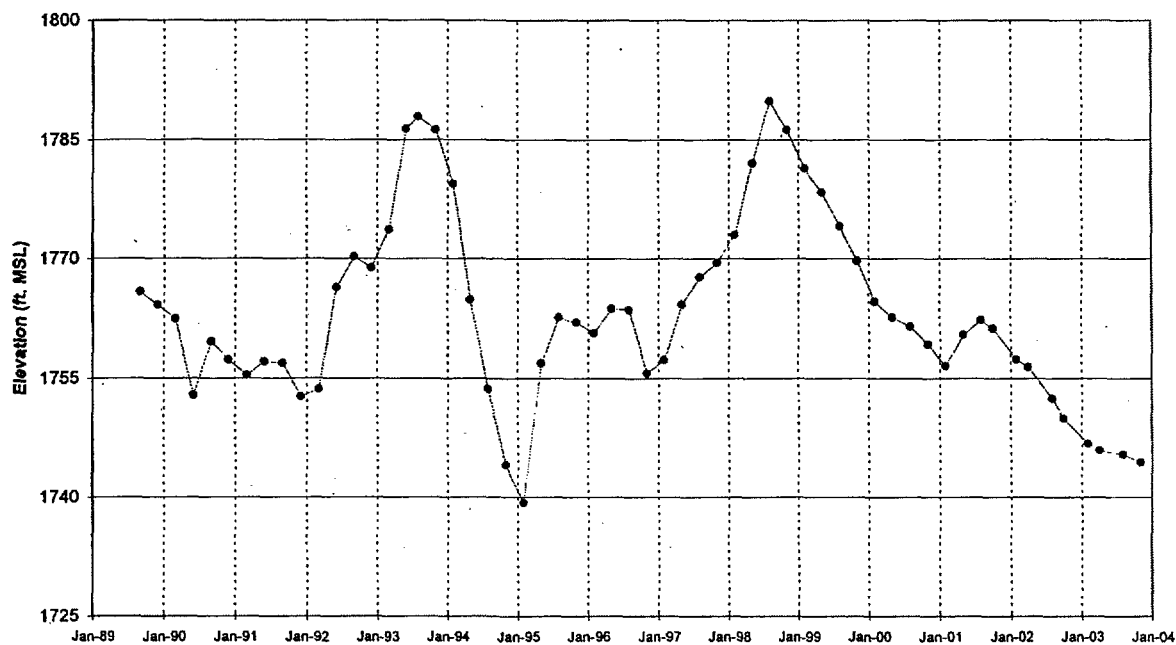
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-11
Figure A-105



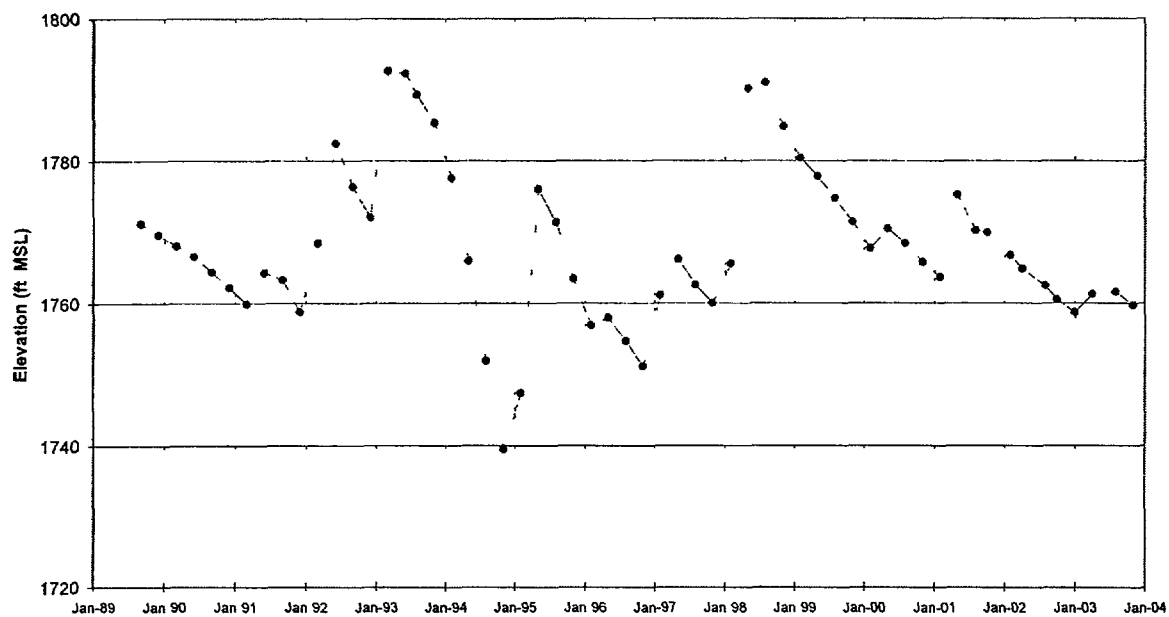
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-12
Figure A-106



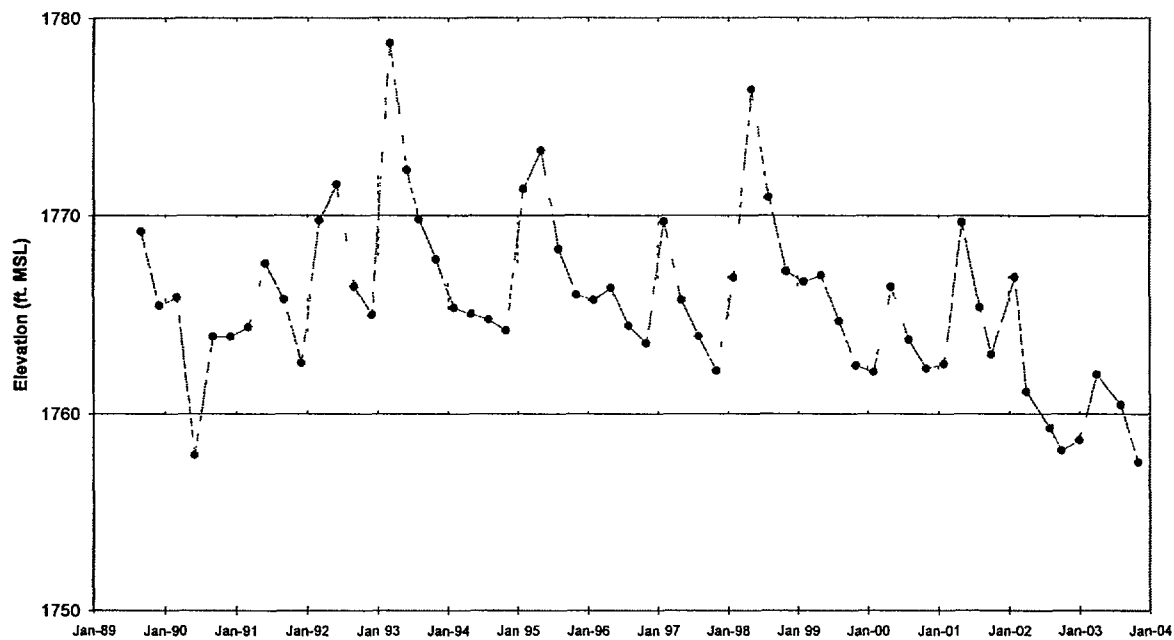
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-13
Figure A-107



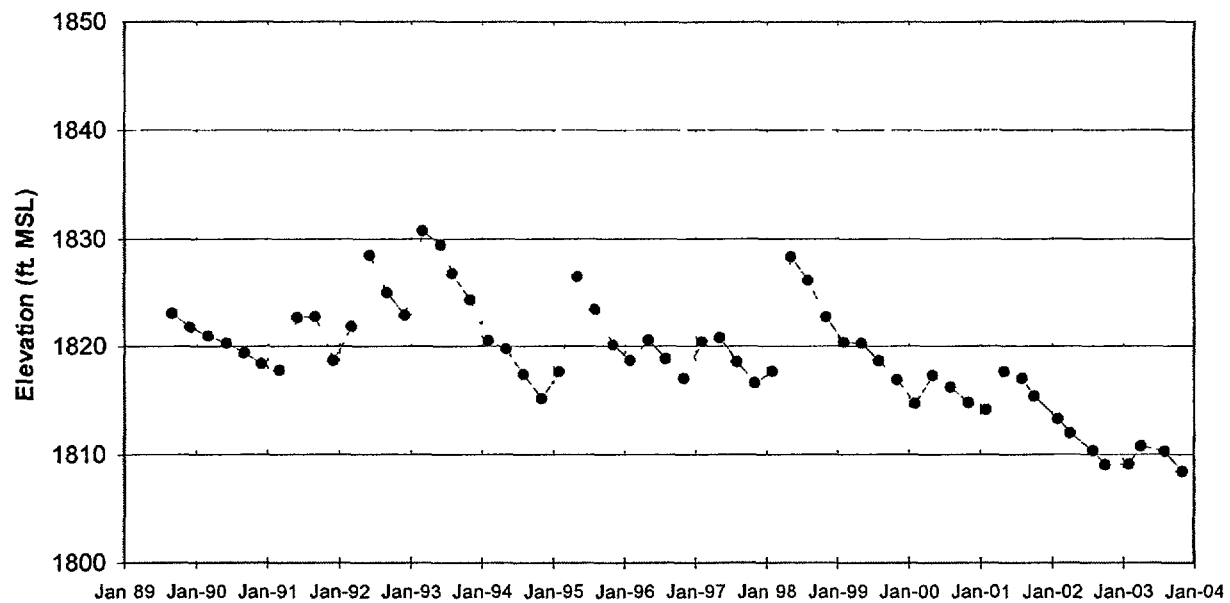
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-14
Figure A-108



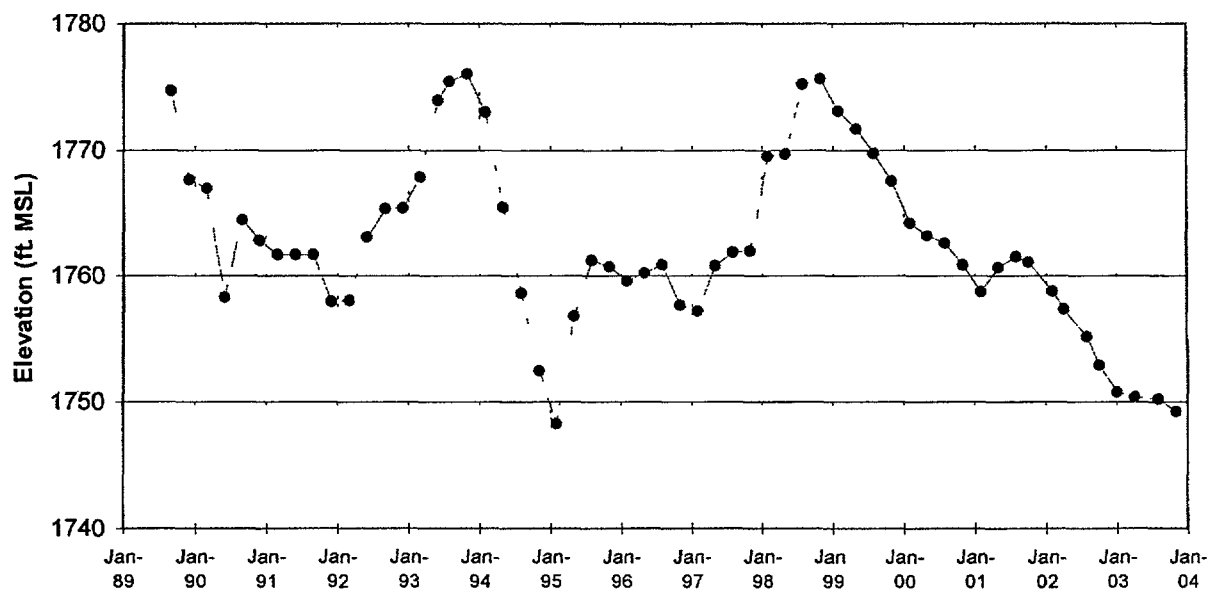
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-15
Figure A-109



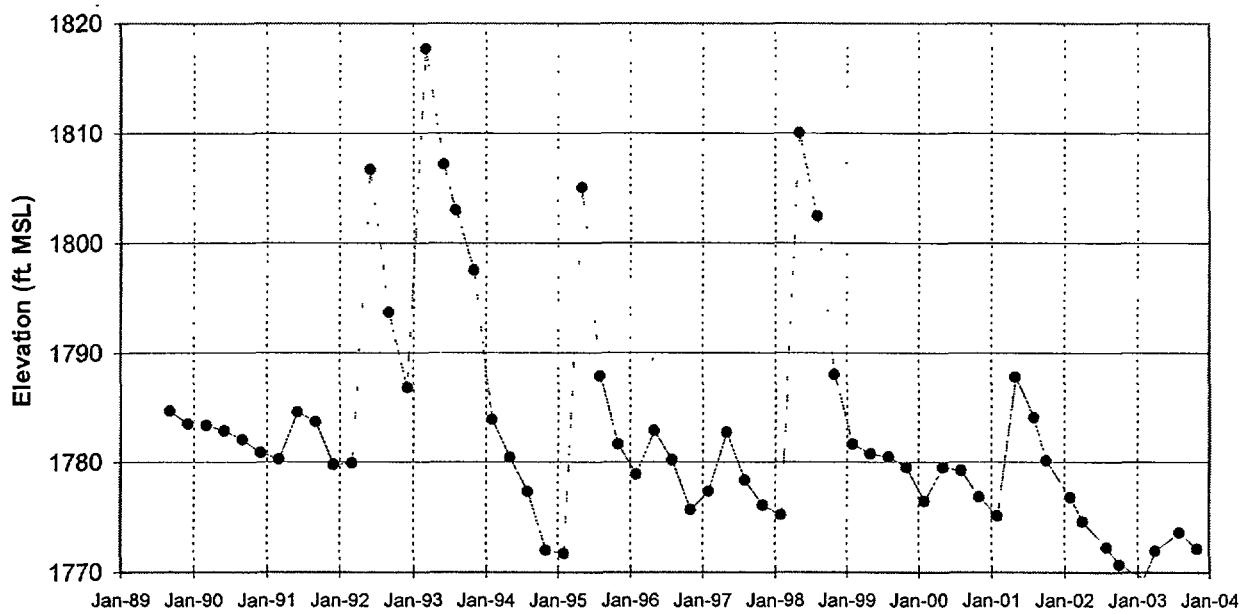
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-16
Figure A-110



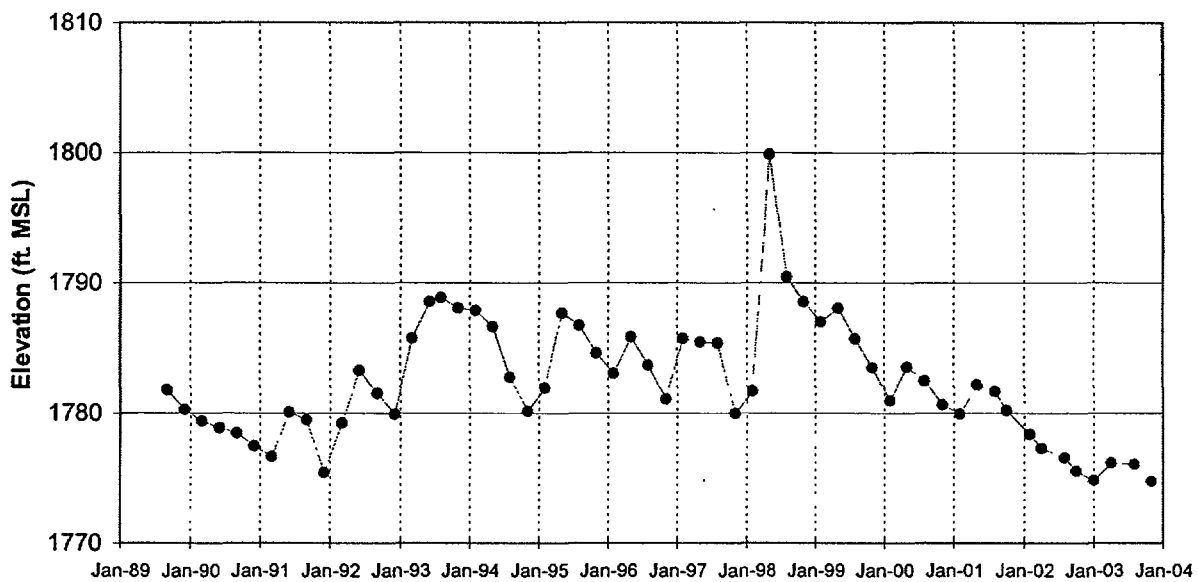
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-17
Figure A-111



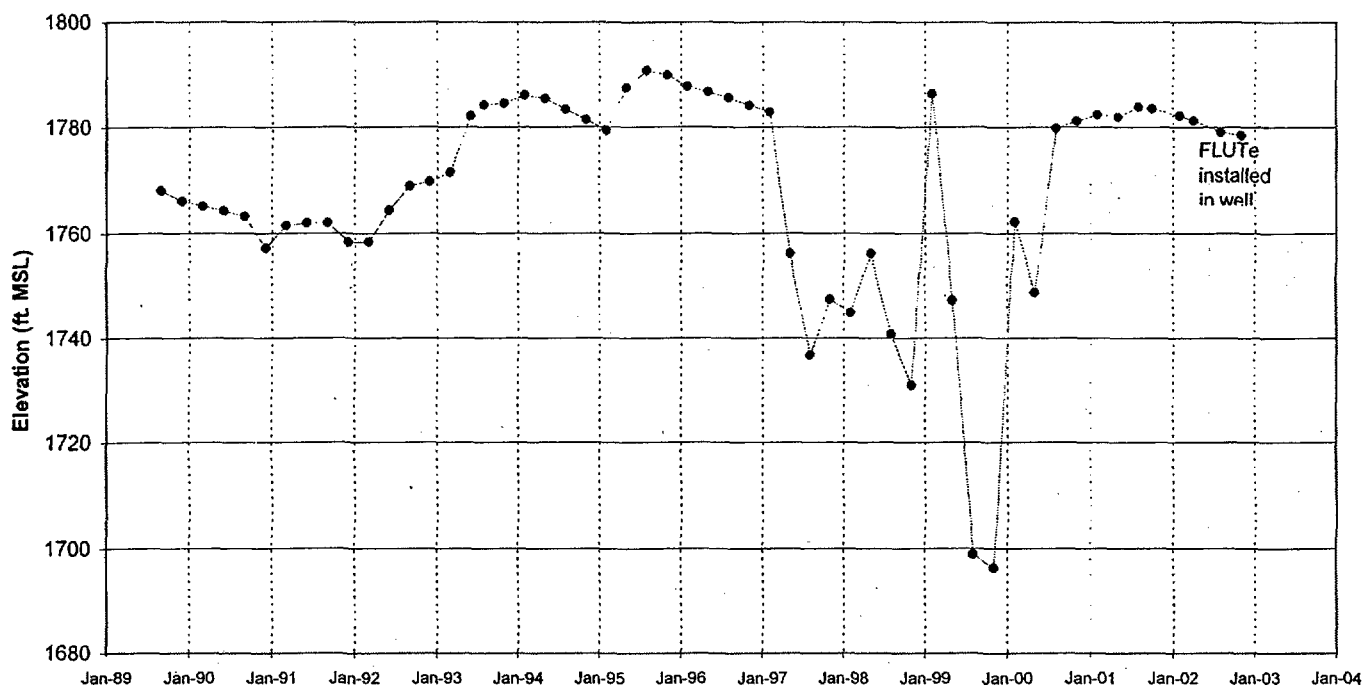
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-18
Figure A-112



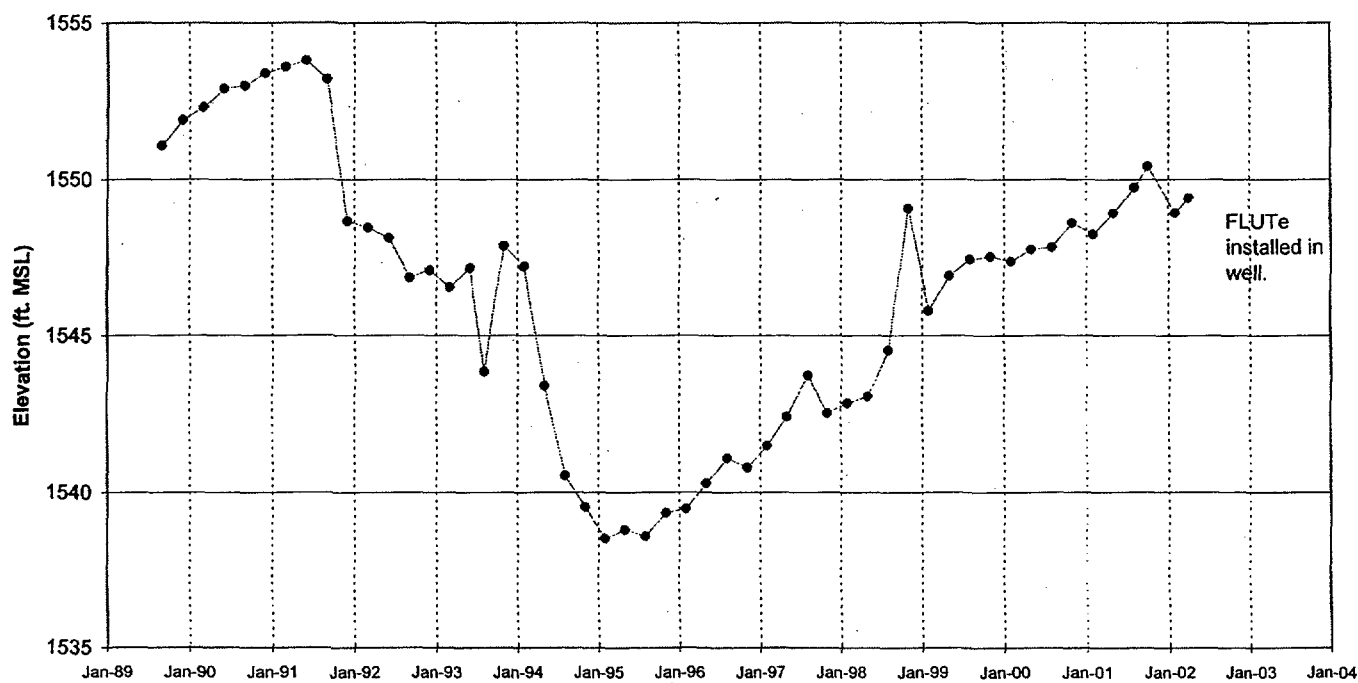
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-19
Figure A-113



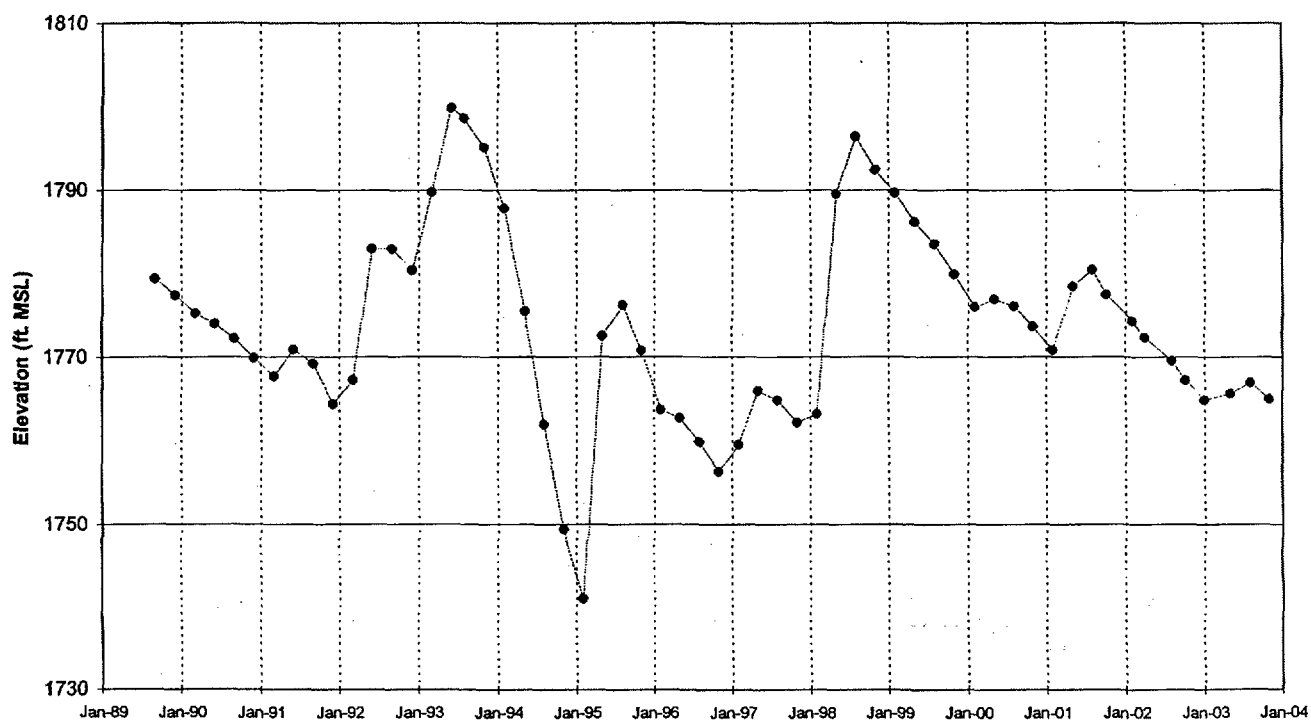
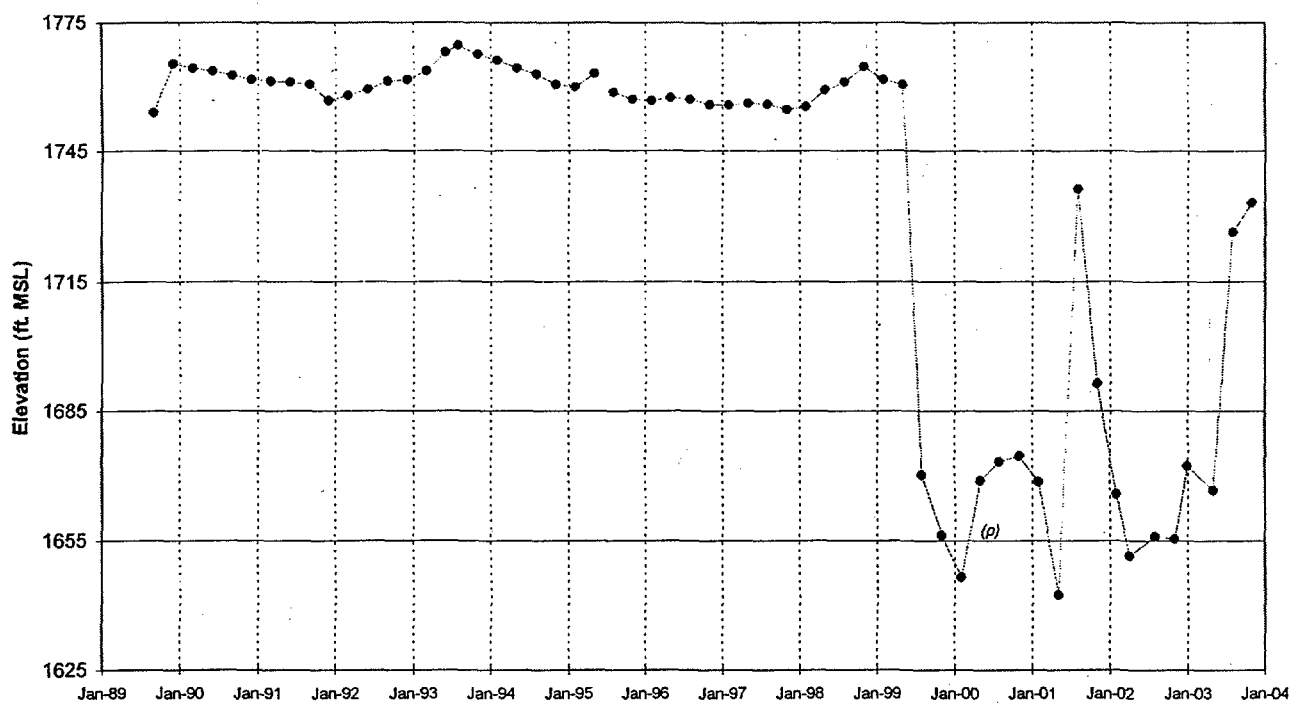
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-20
Figure A-114

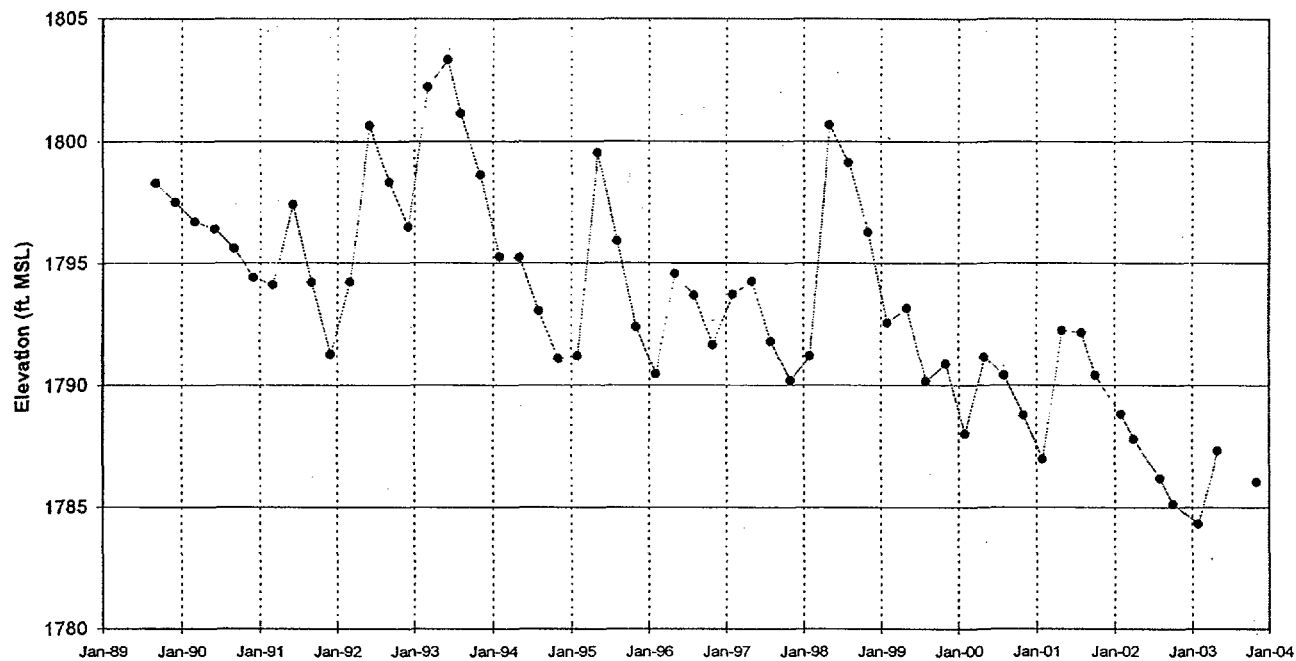


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-21
Figure A-115

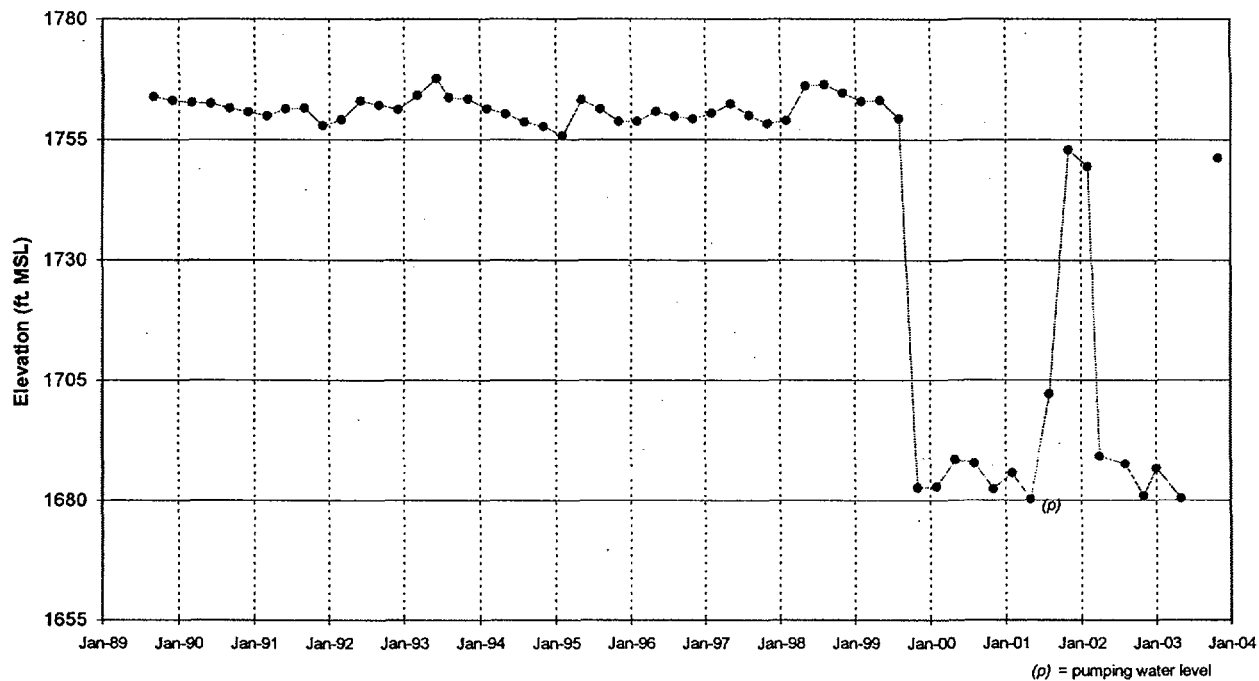


WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-22
Figure A-116

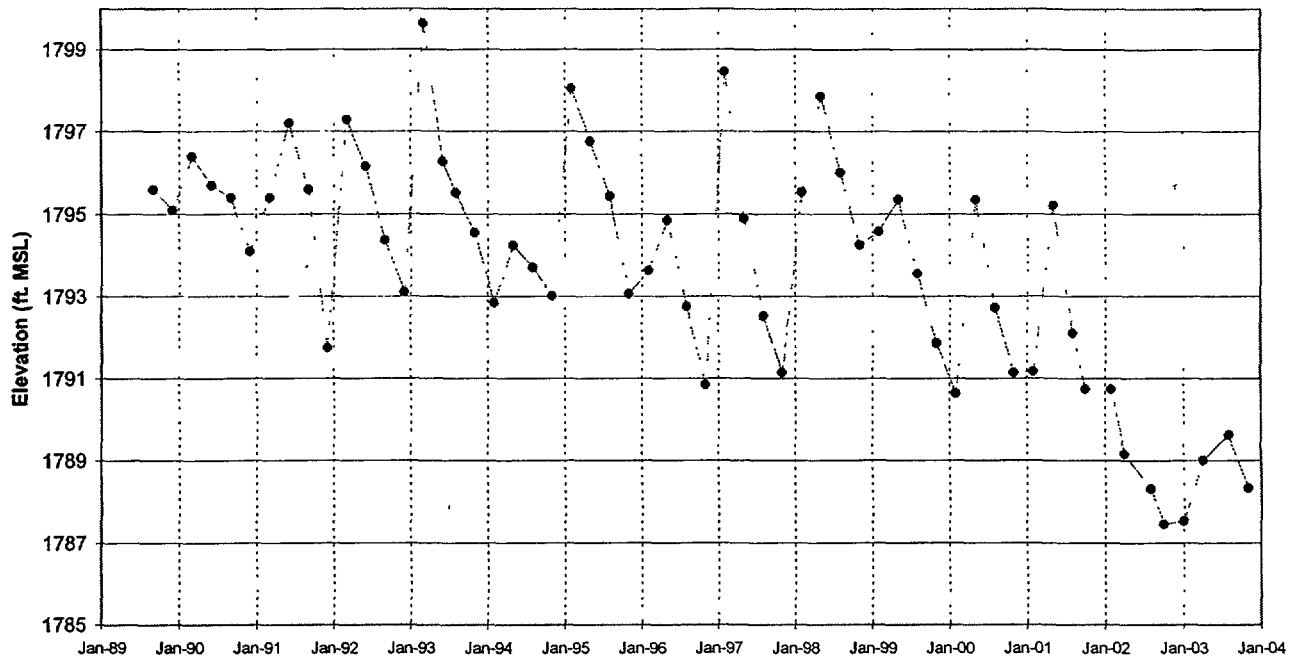




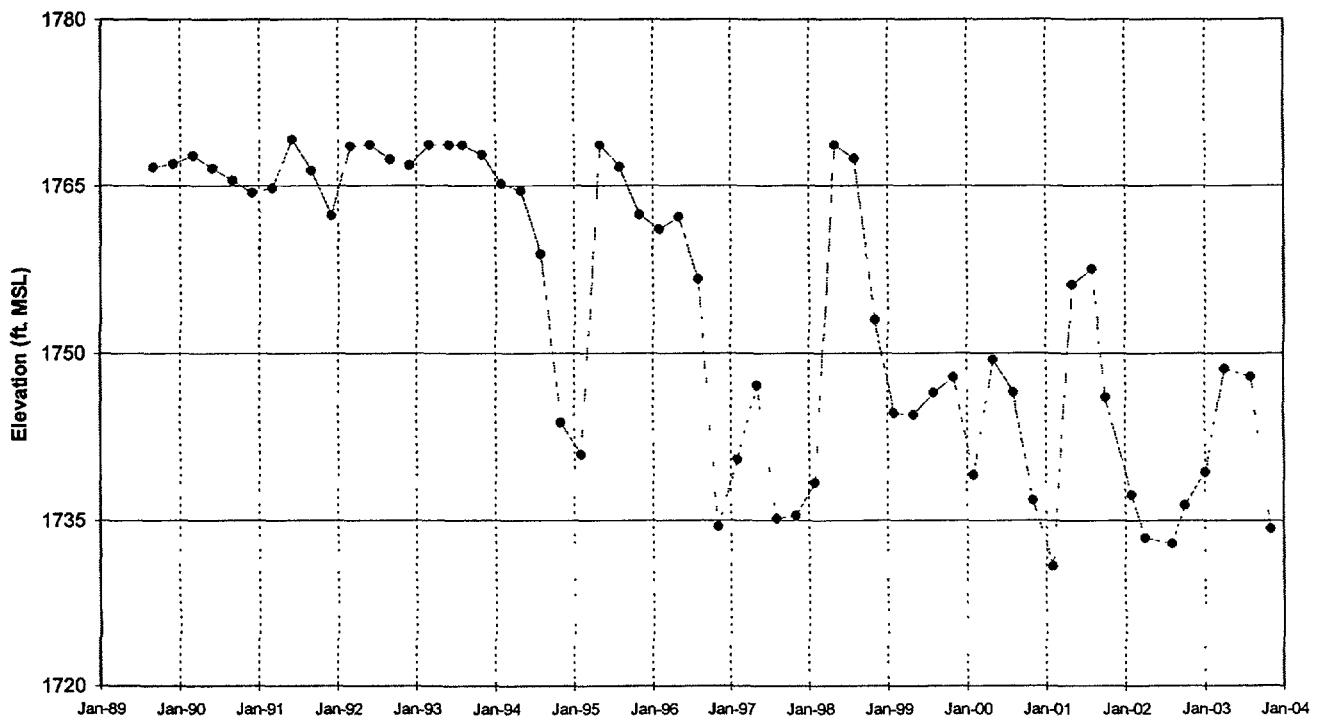
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-27
Figure A-121



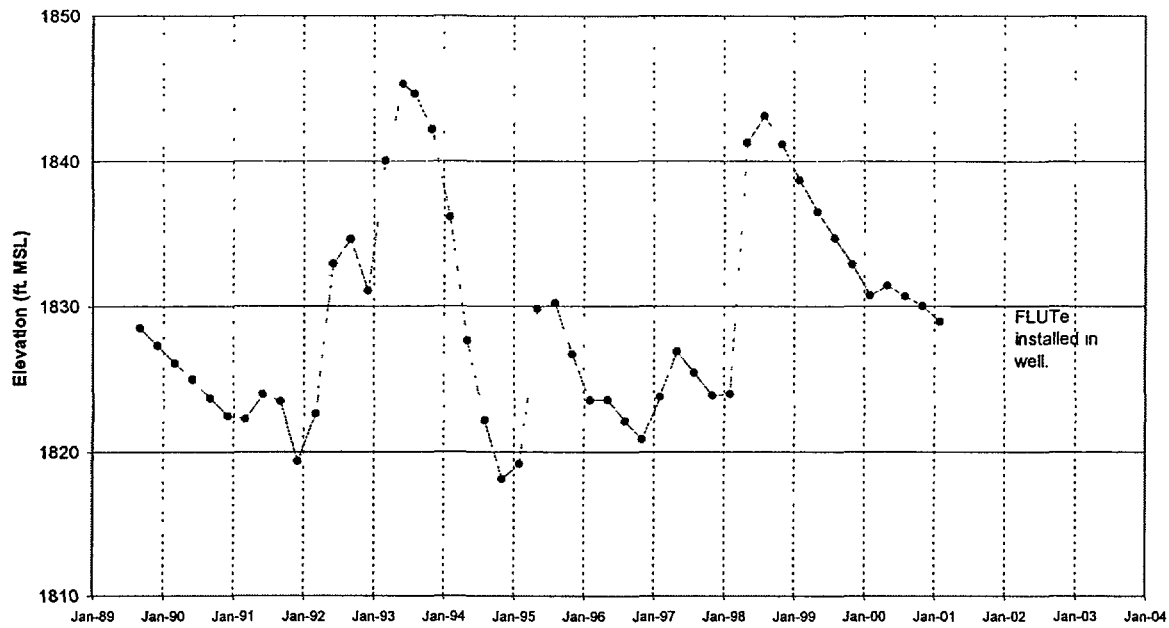
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-28
Figure A-122



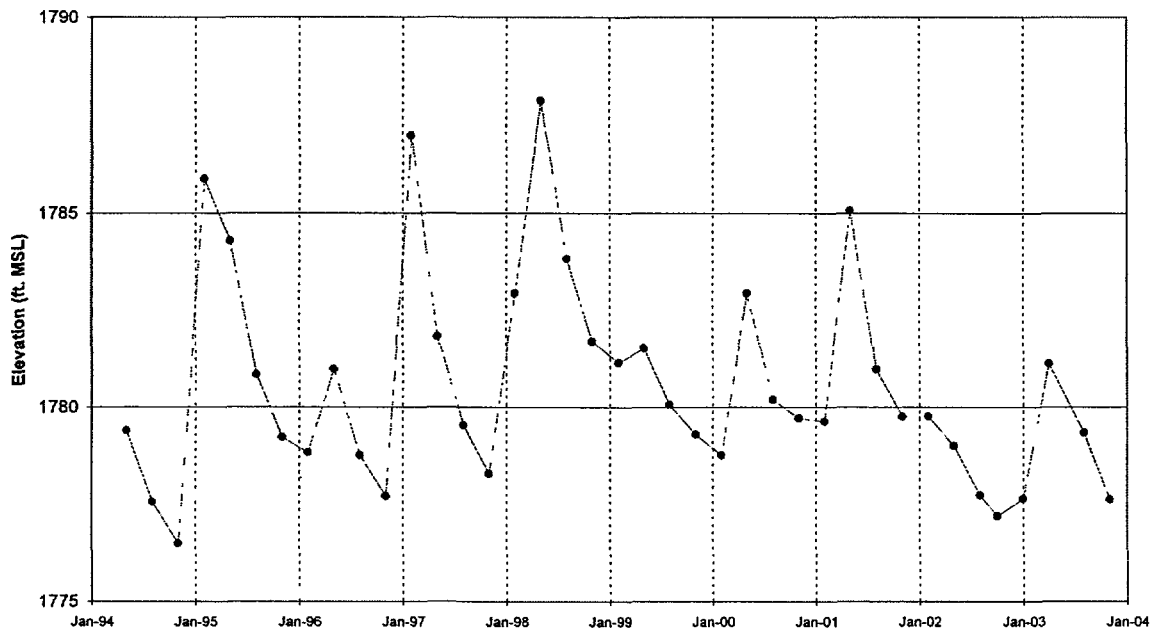
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-29
Figure A-123



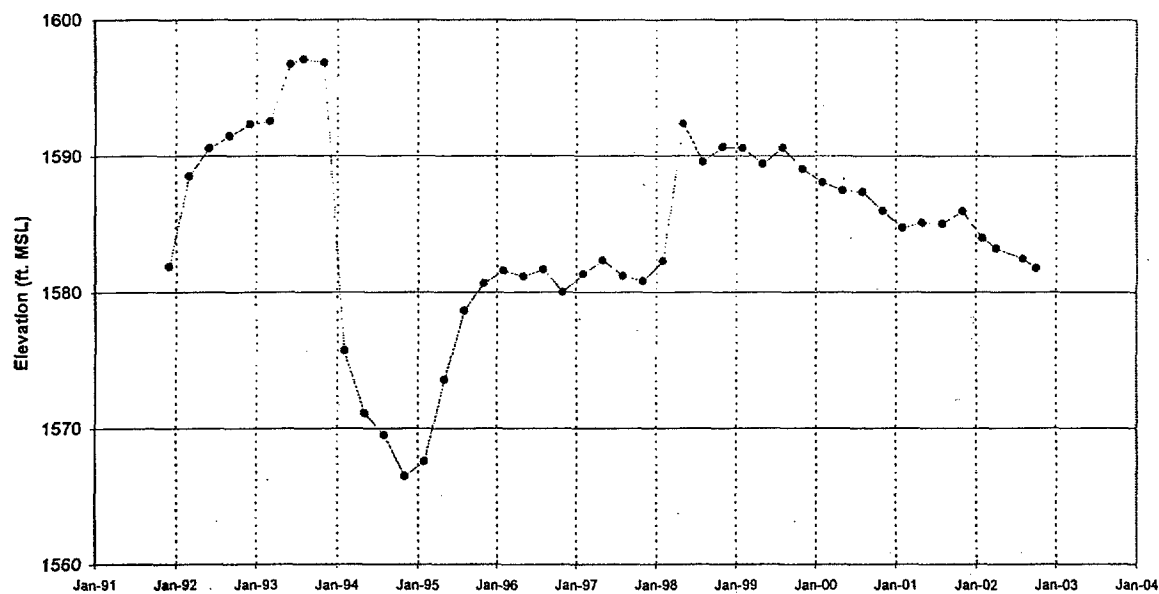
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-30
Figure A-124



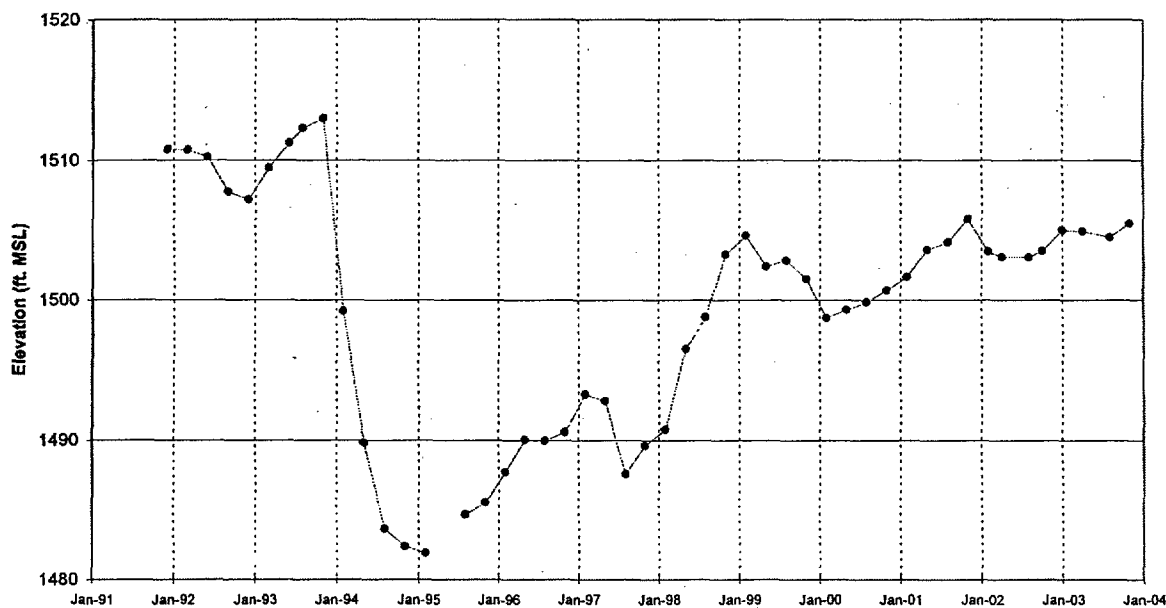
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-31
Figure A-125



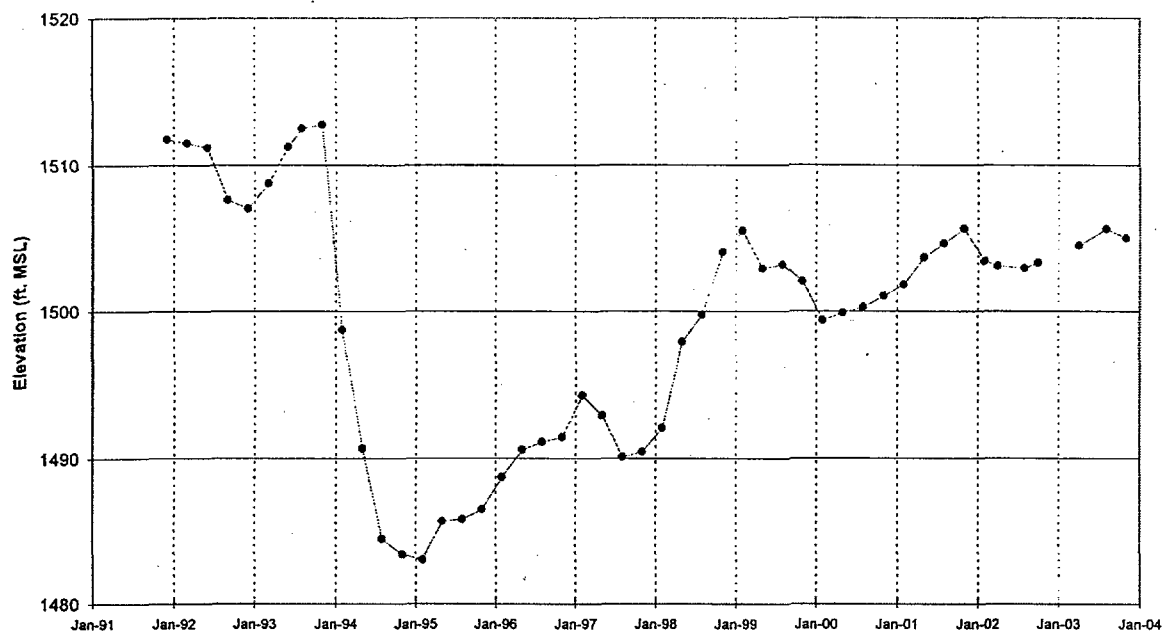
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-32
Figure A-126



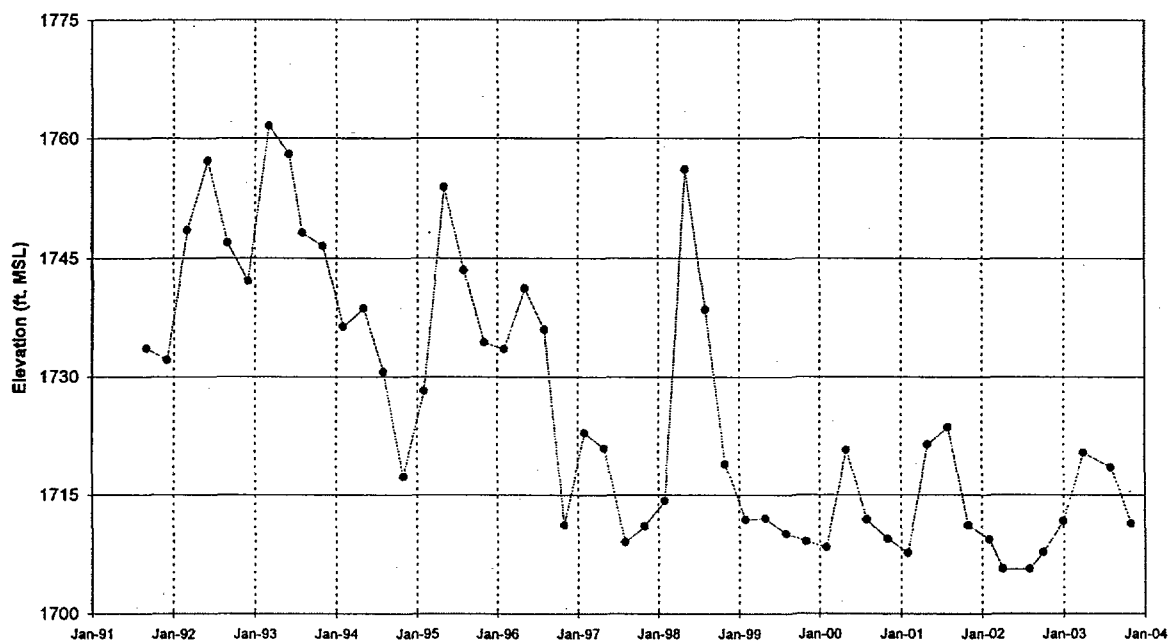
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-33A
Figure A-127



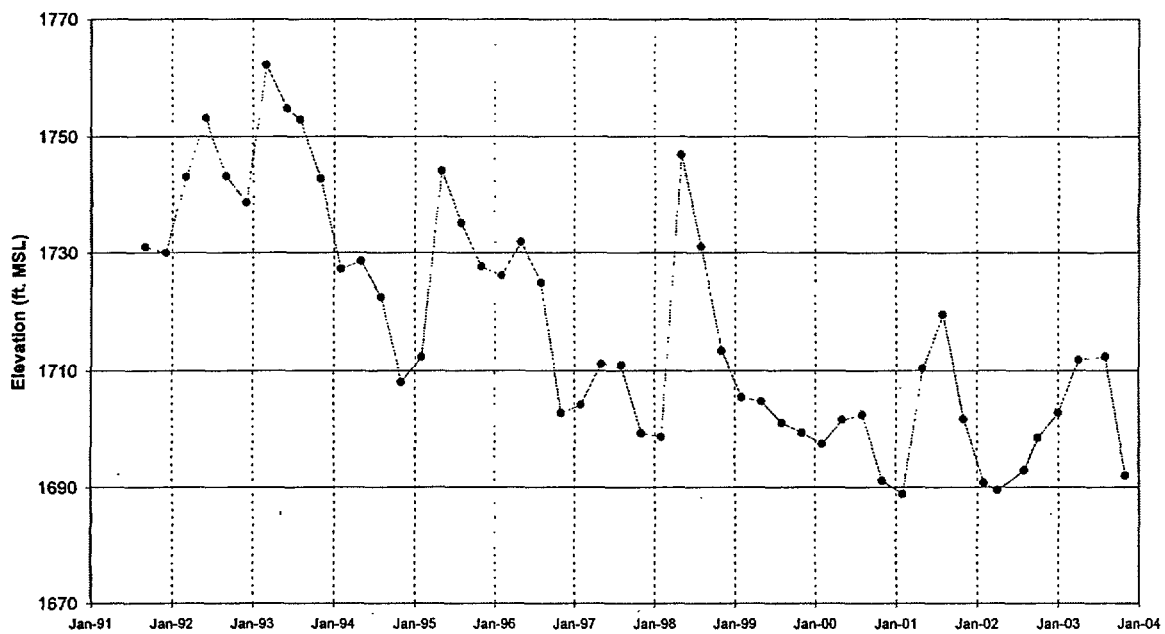
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-33B
Figure A-128



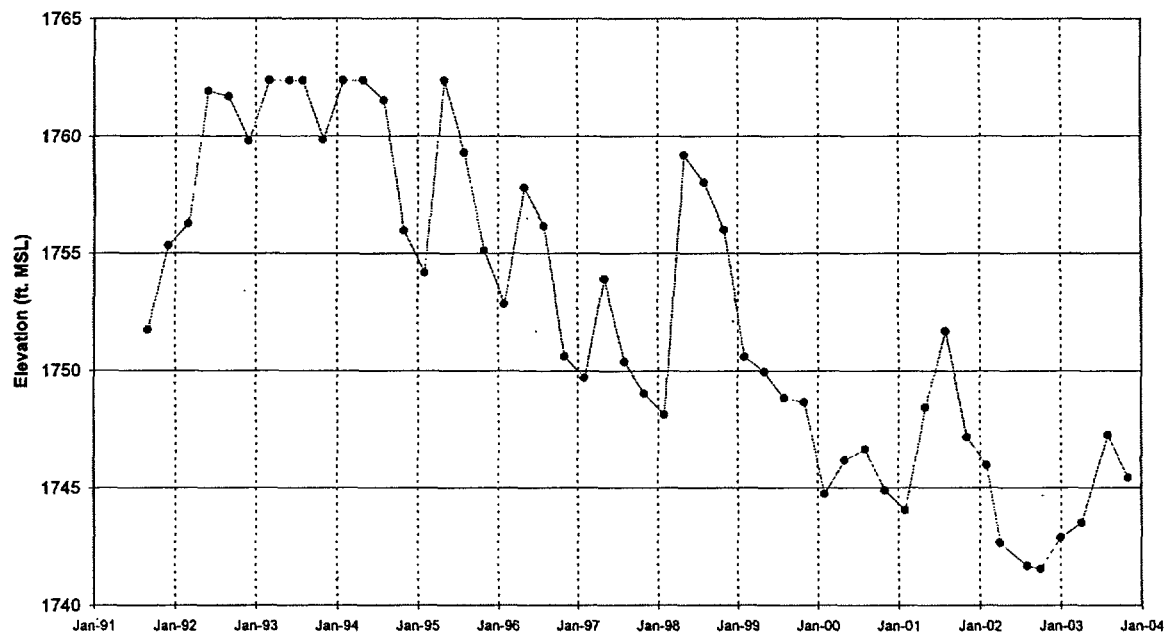
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-33C
Figure A-129



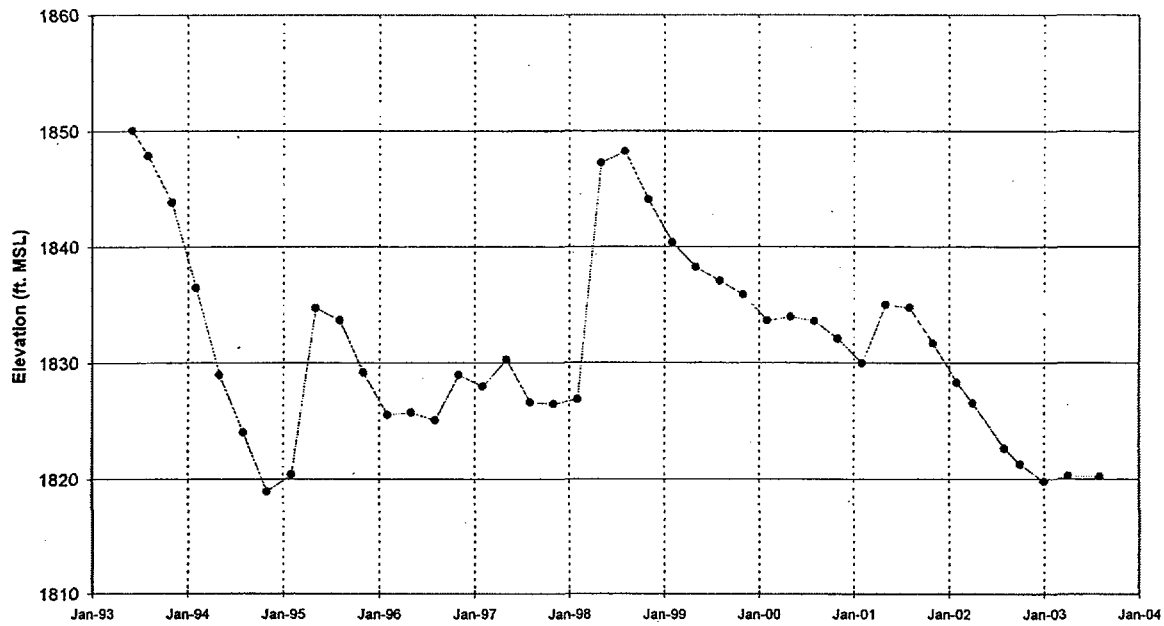
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-34A
Figure A-130



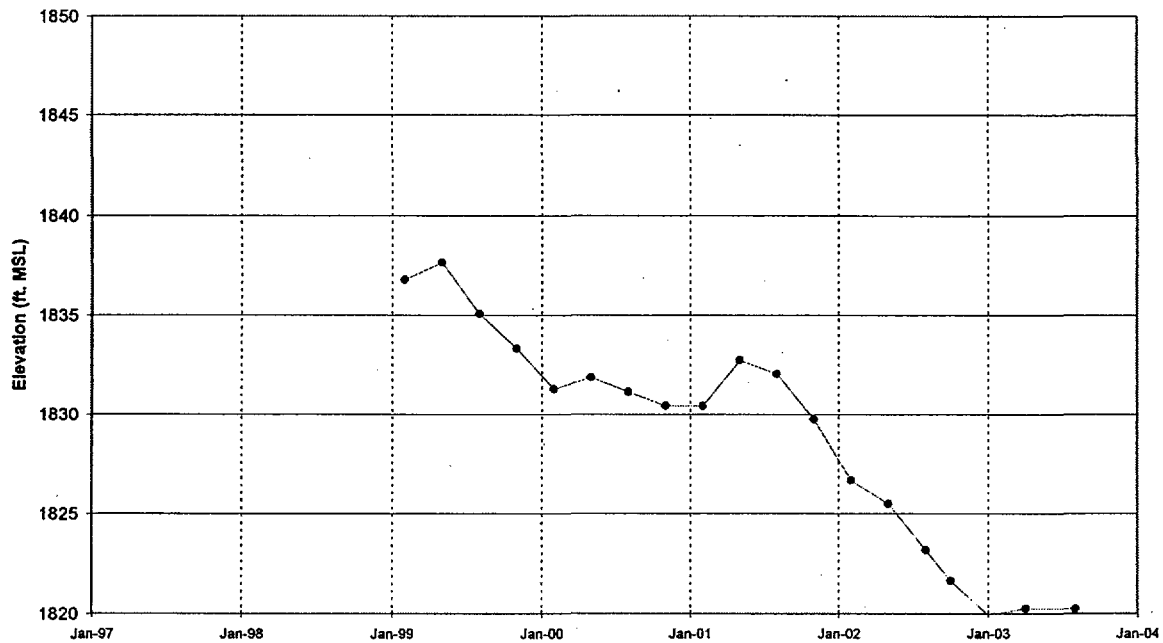
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-34B
Figure A-131



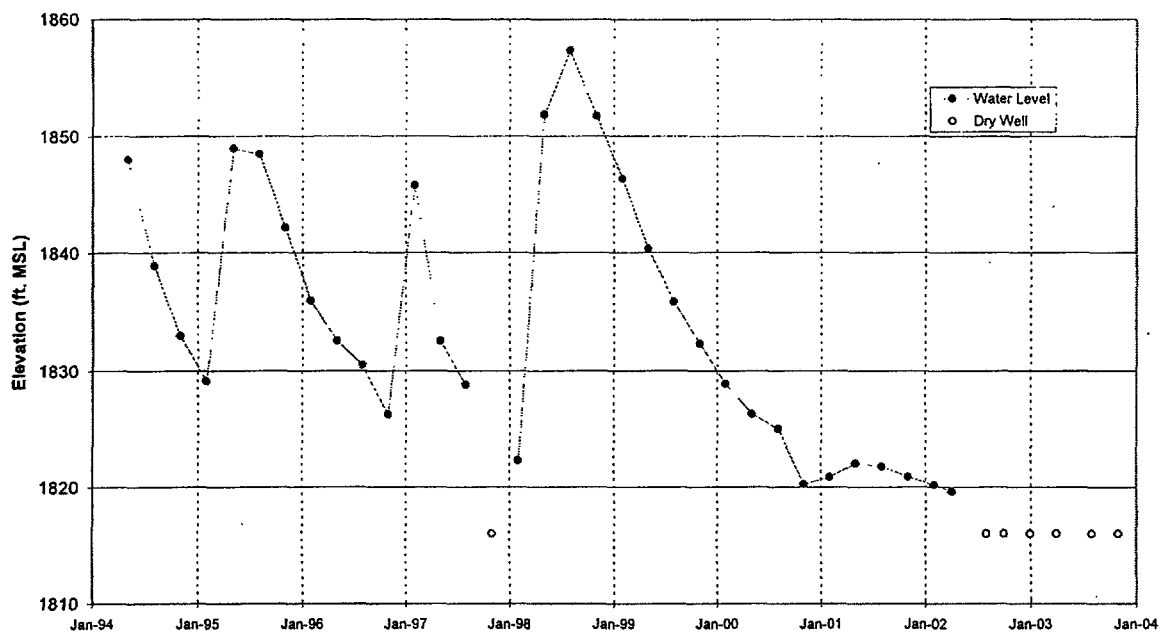
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-34C
Figure A-132



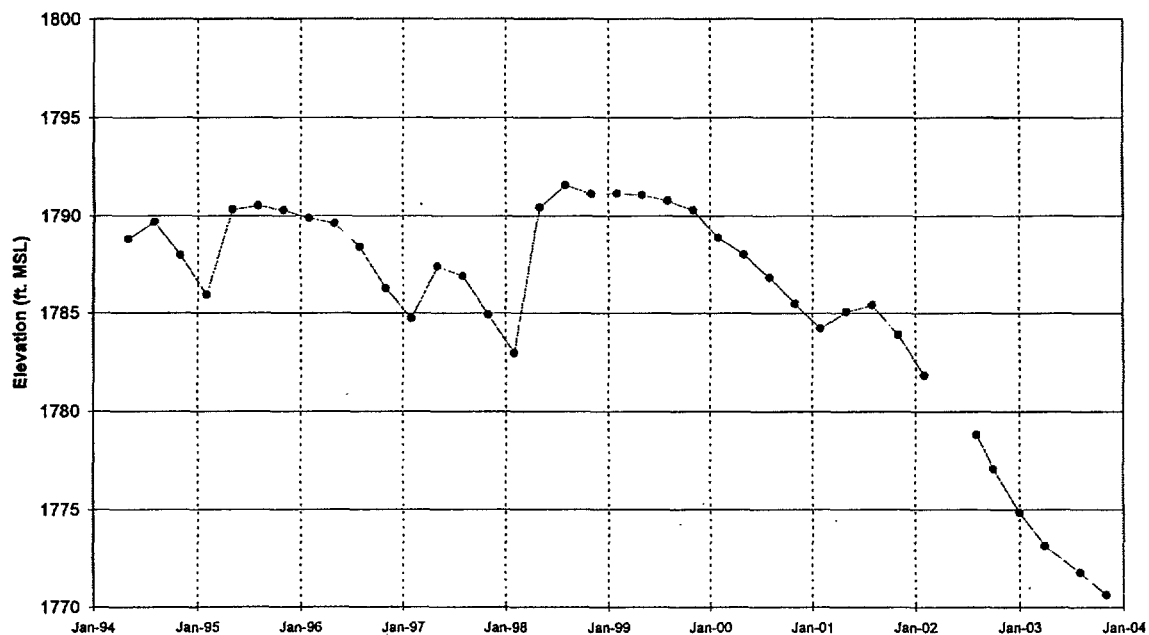
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-35A
Figure A-133



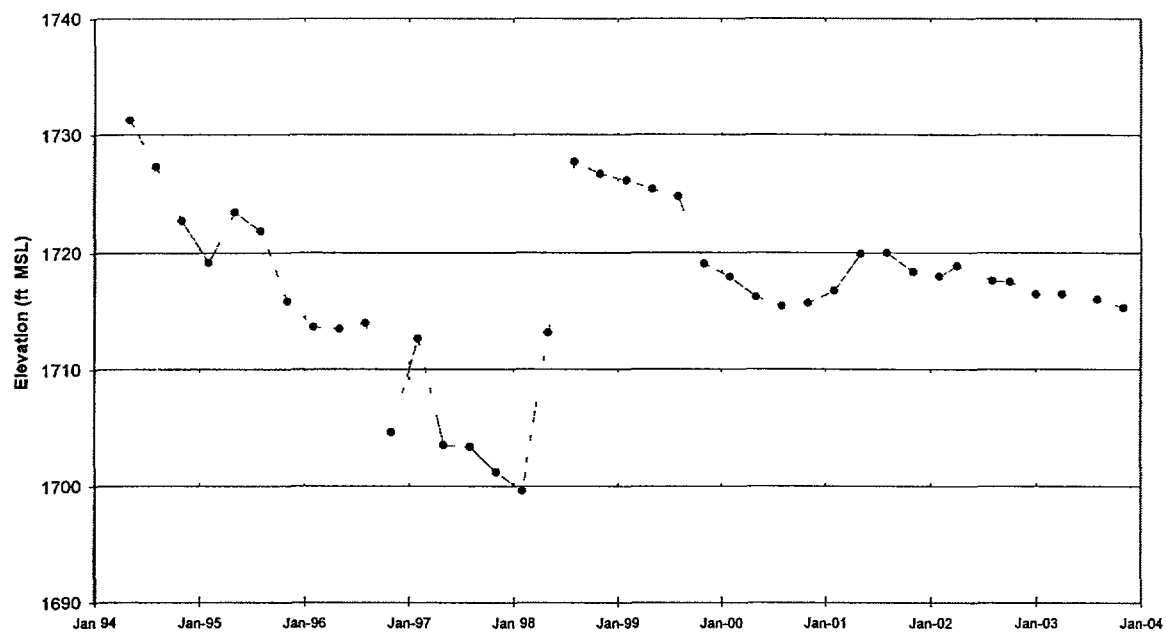
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-35B
Figure A-134



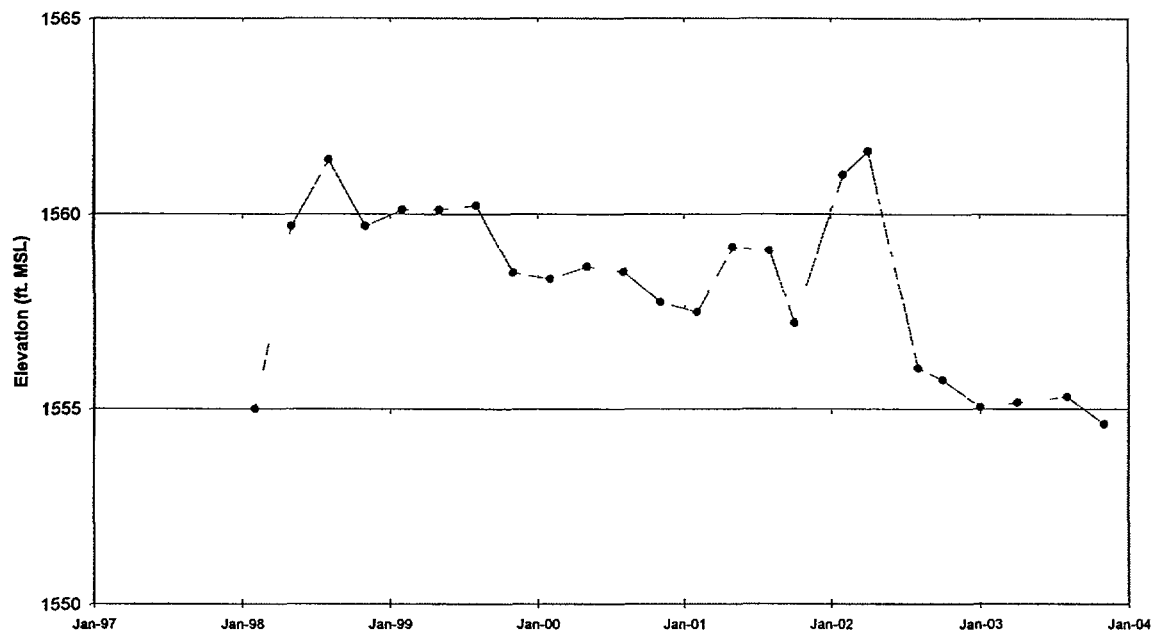
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36A
Figure A-135



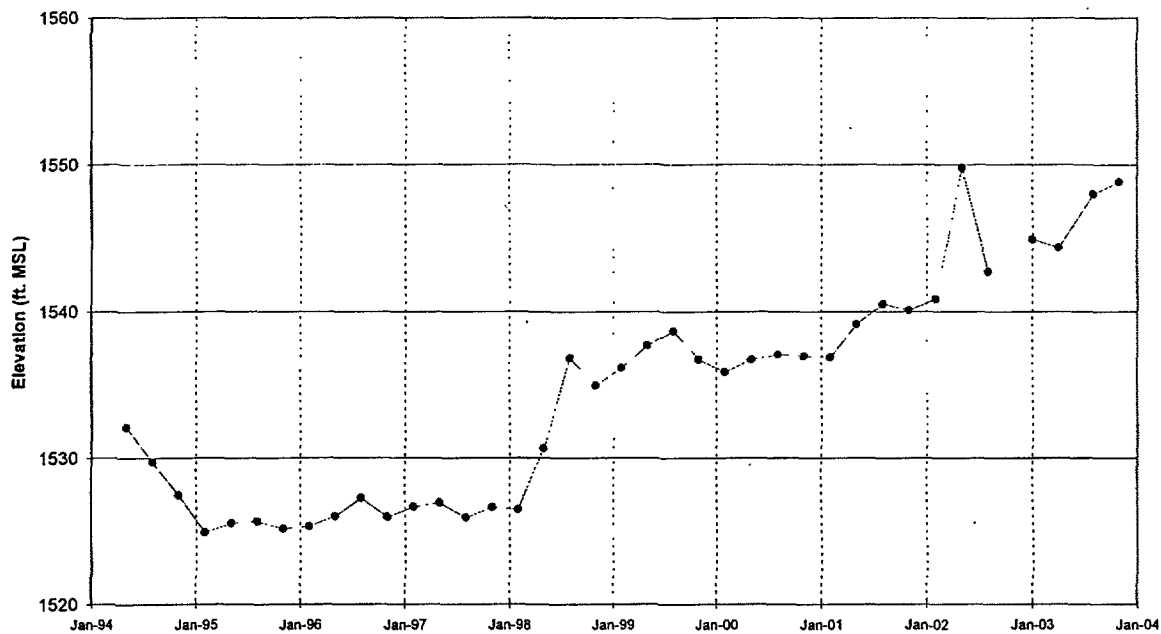
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36B
Figure A-136



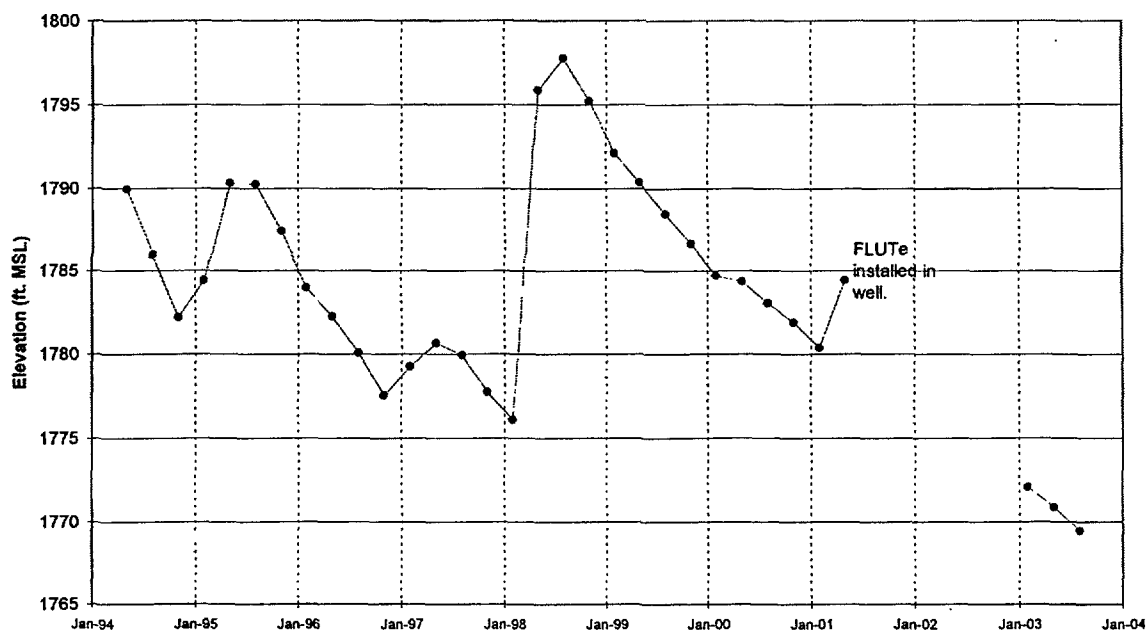
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-36C
Figure A-137



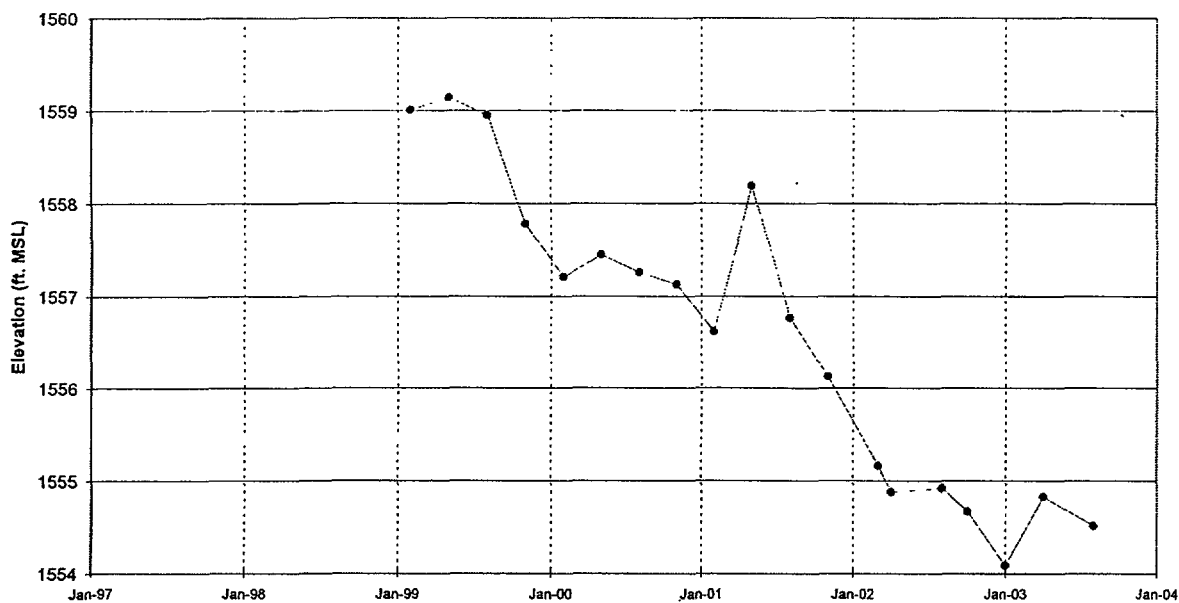
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD 36D
Figure A-138



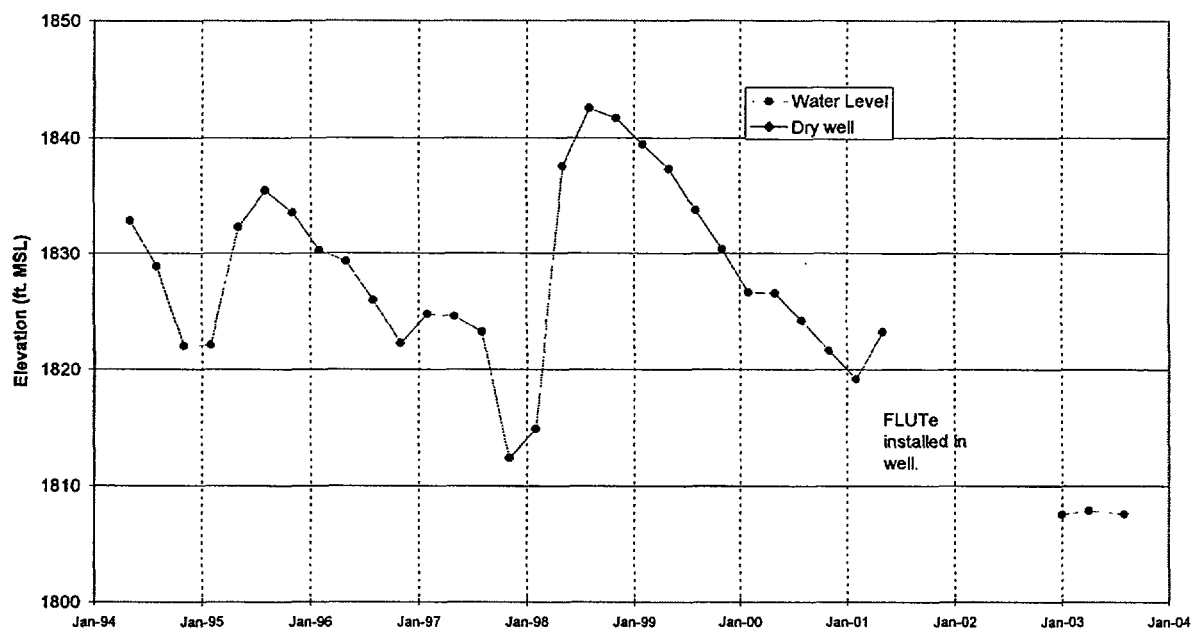
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-37
Figure A-139



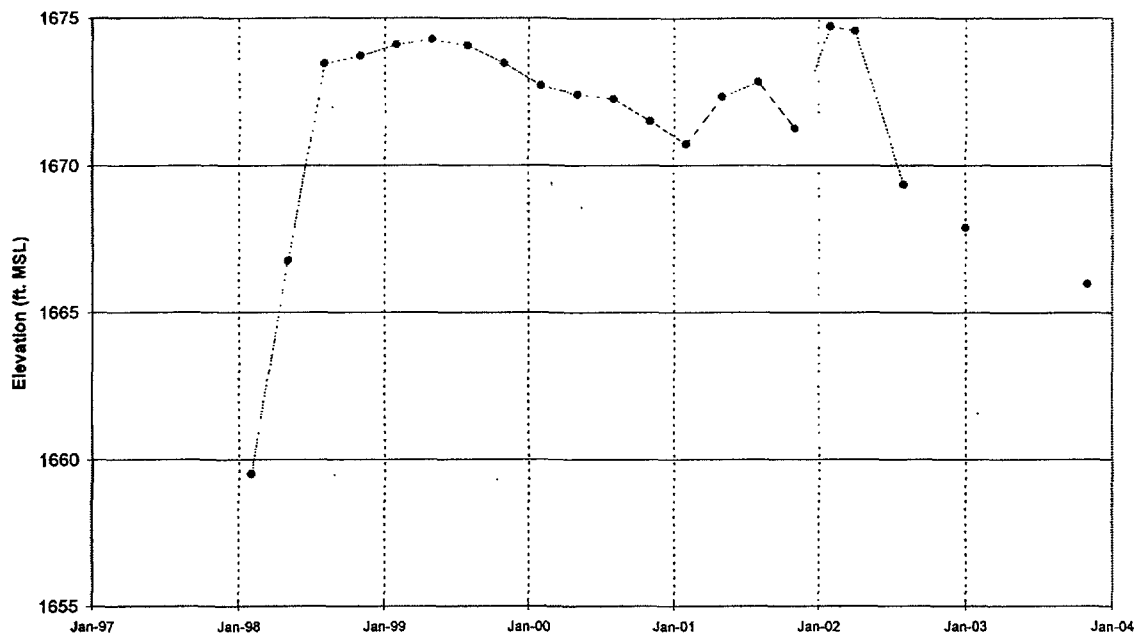
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-38A
Figure A-140



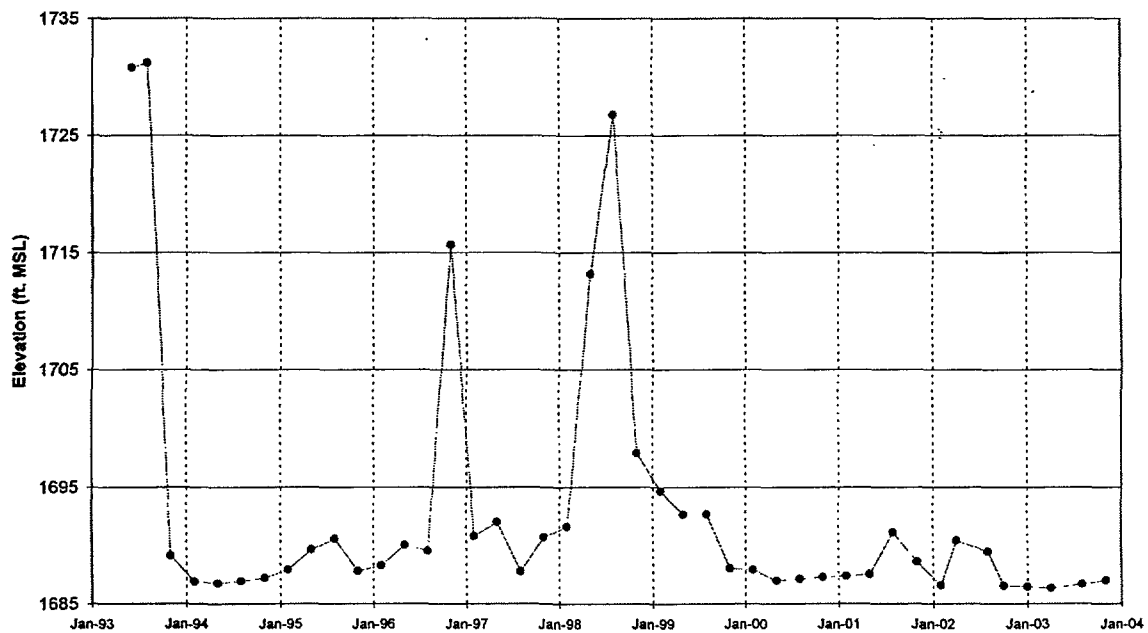
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-38B
Figure A-141



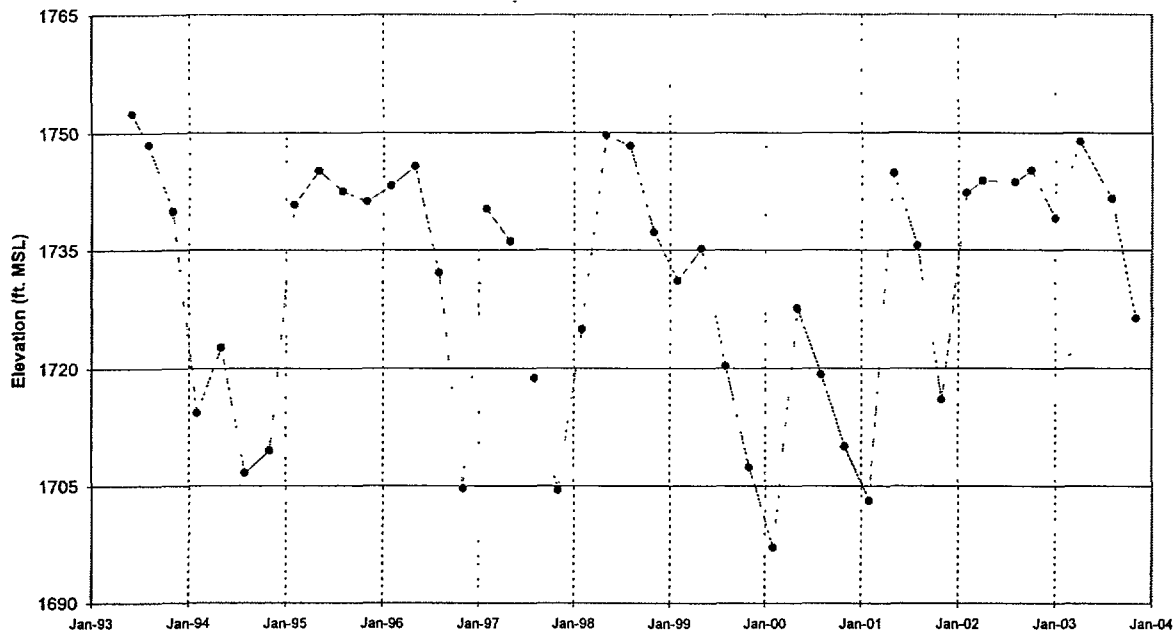
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-39A
Figure A-142



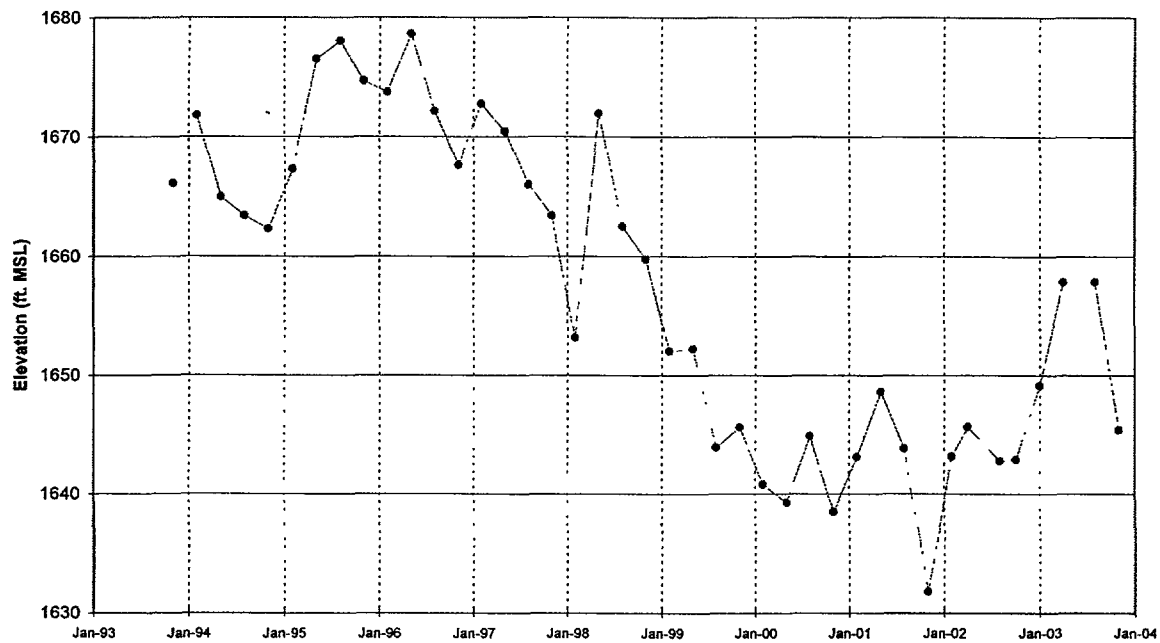
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-39B
Figure A-143



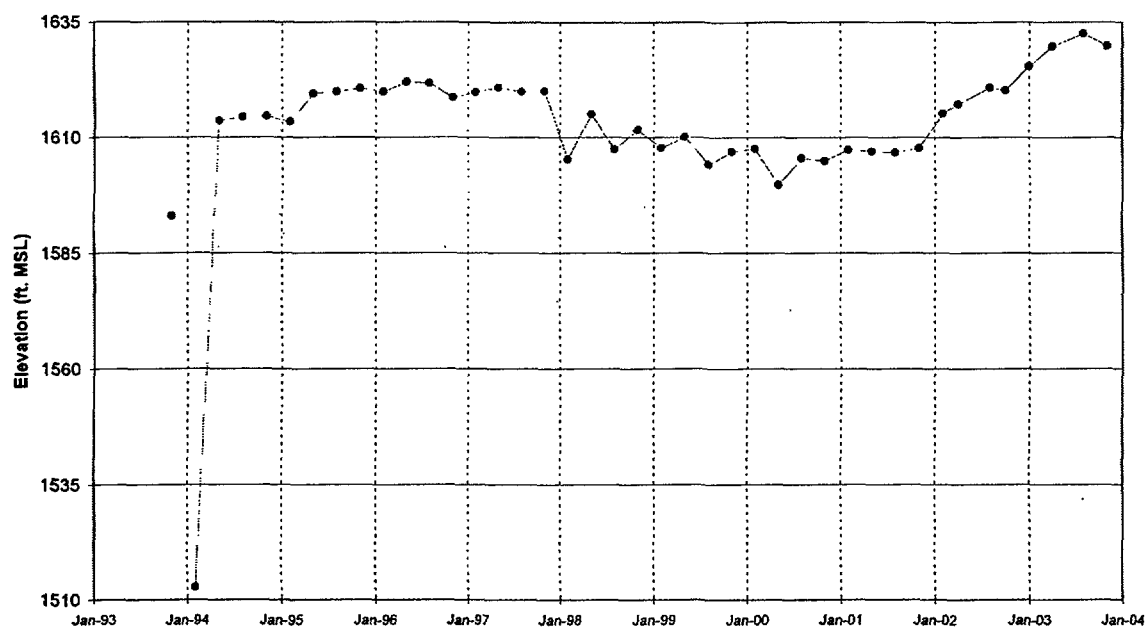
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-40
Figure A-144



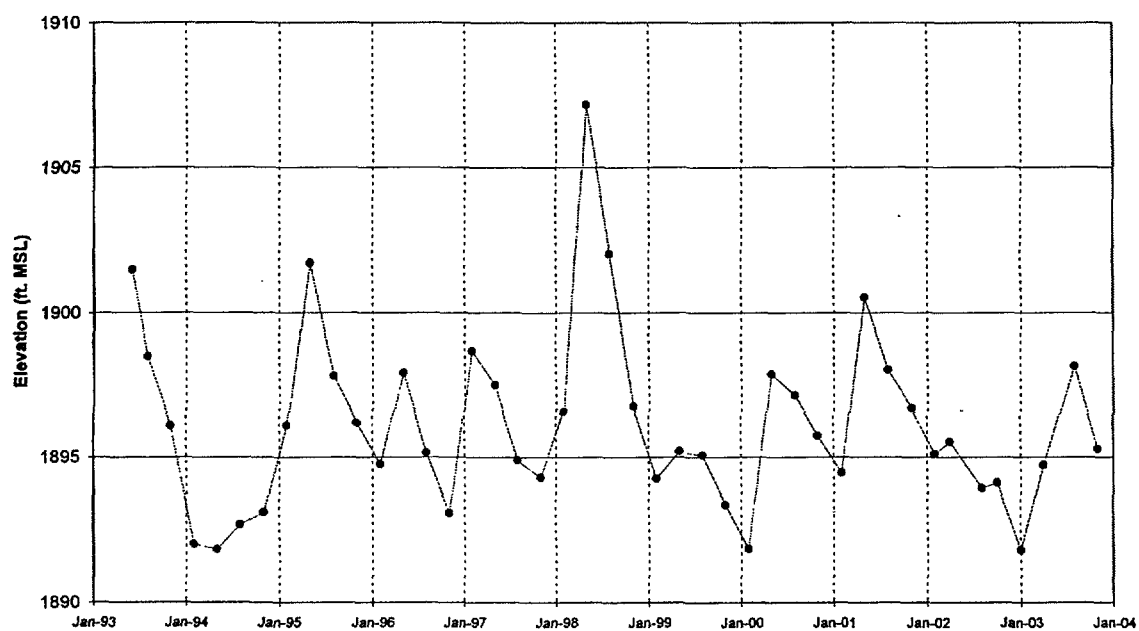
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-41A
Figure A-145



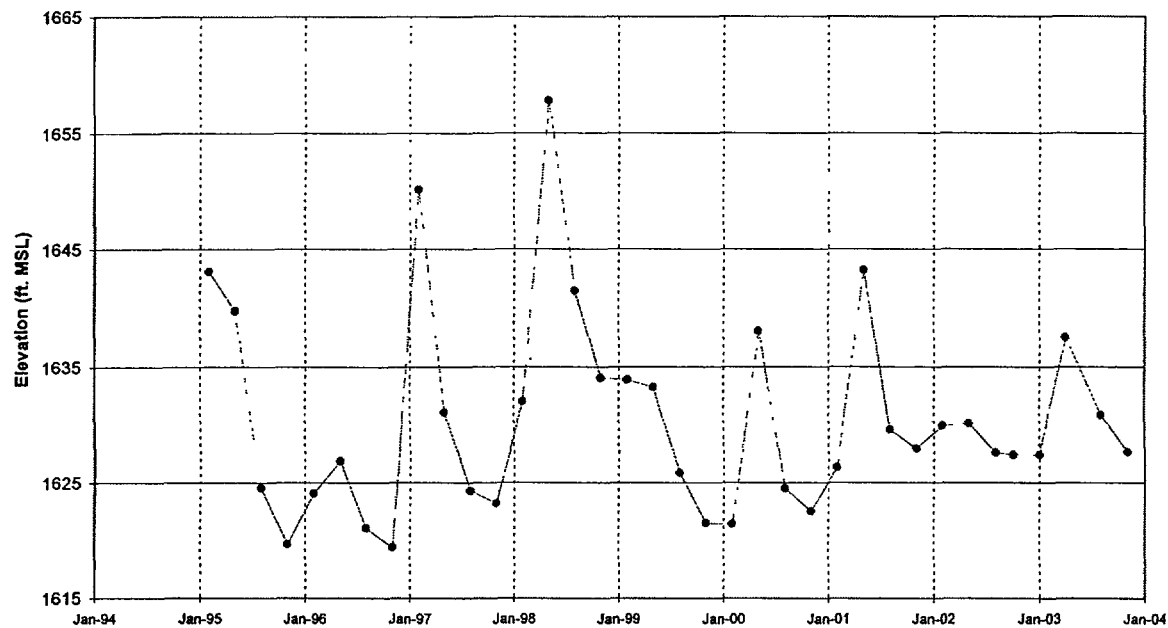
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-41B
Figure A-146



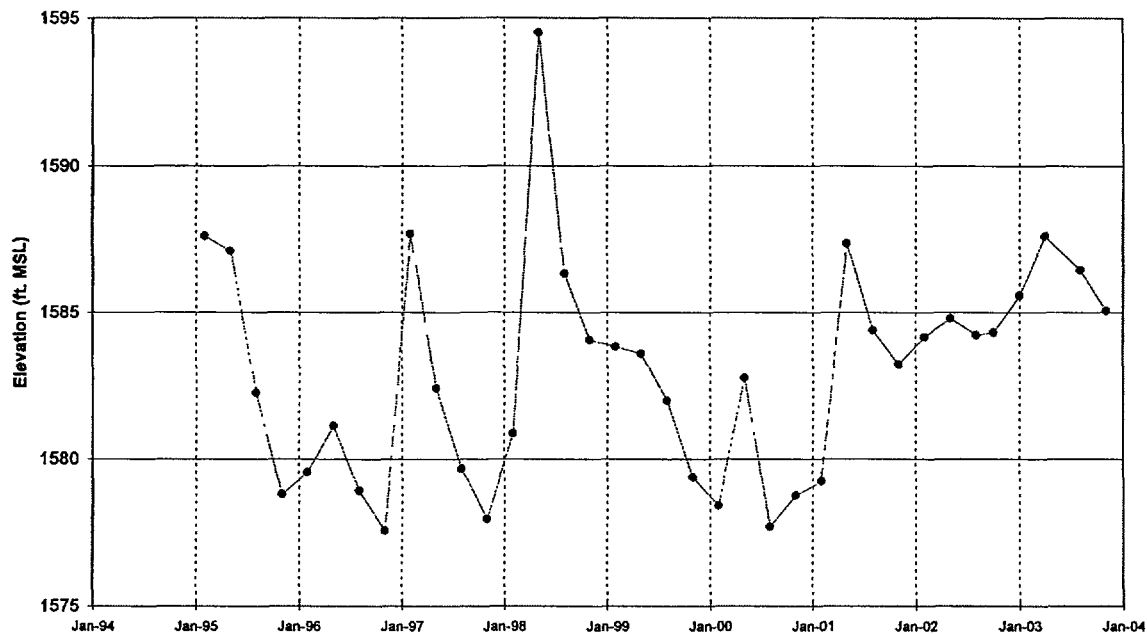
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-41C
Figure A-147



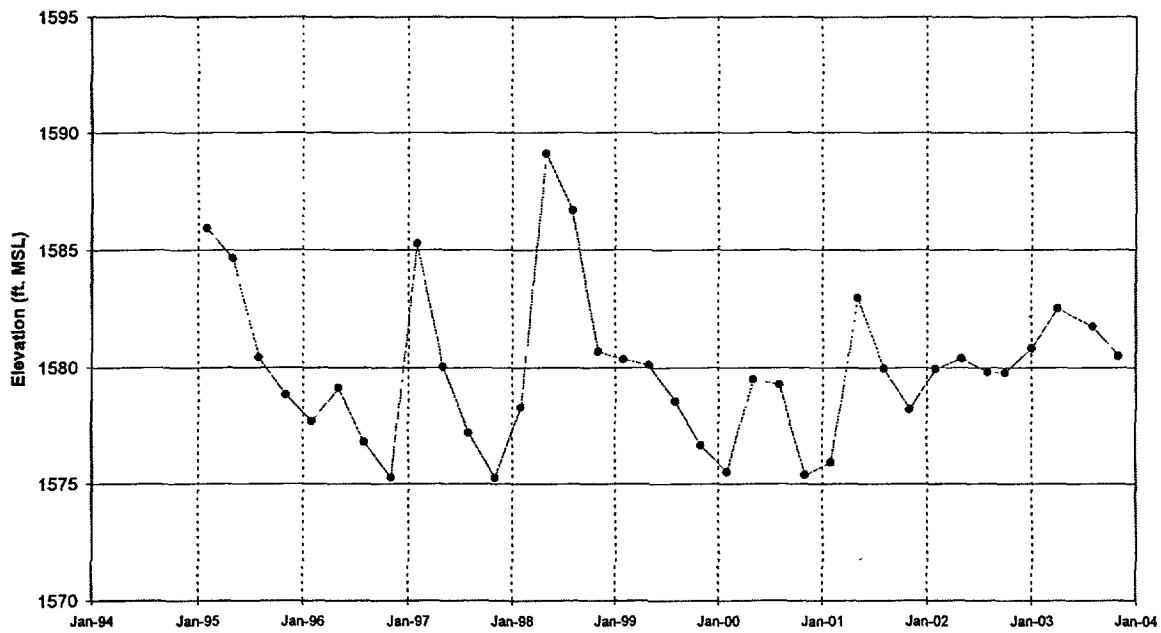
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-42
Figure A-148



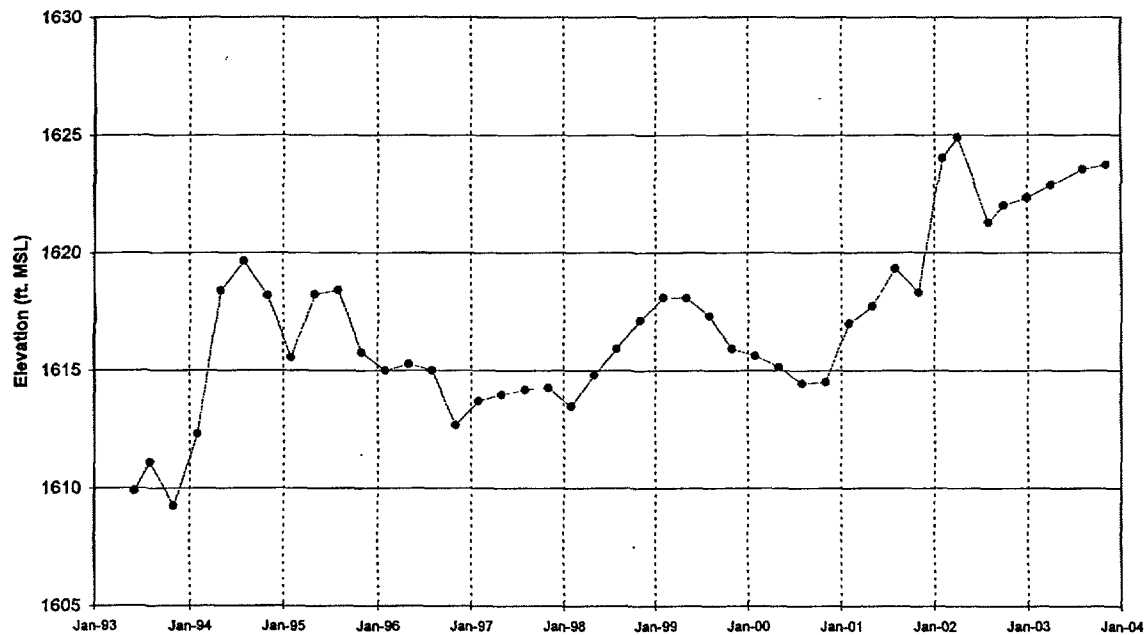
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-43A
Figure A-149



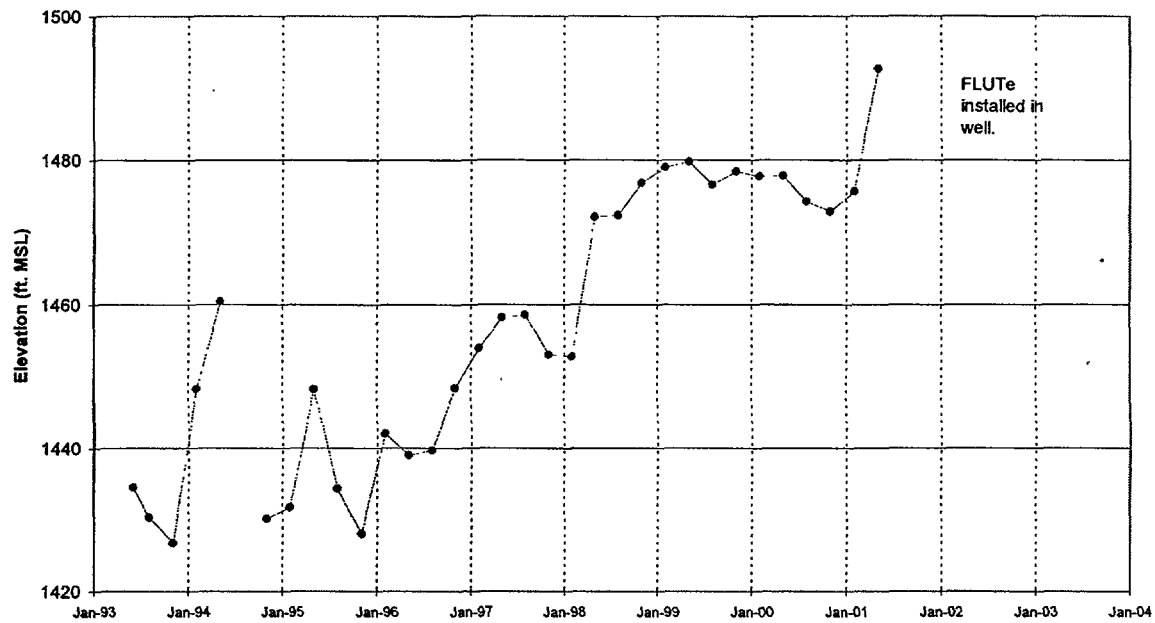
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-43B
Figure A-150



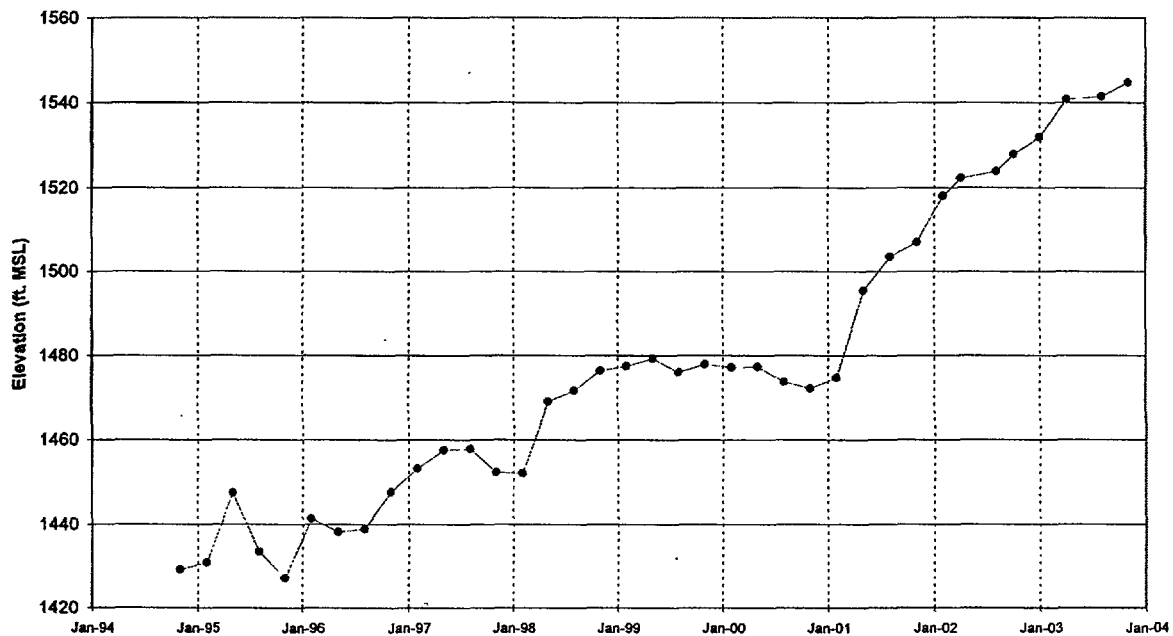
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-43C
Figure A-151



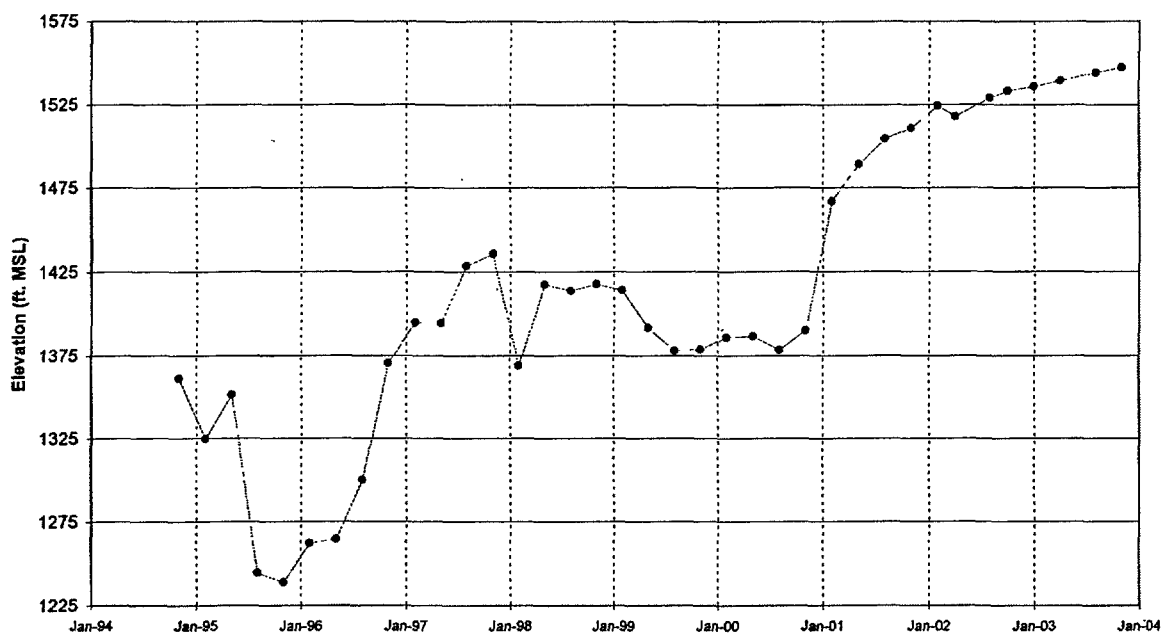
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-44
Figure A-152



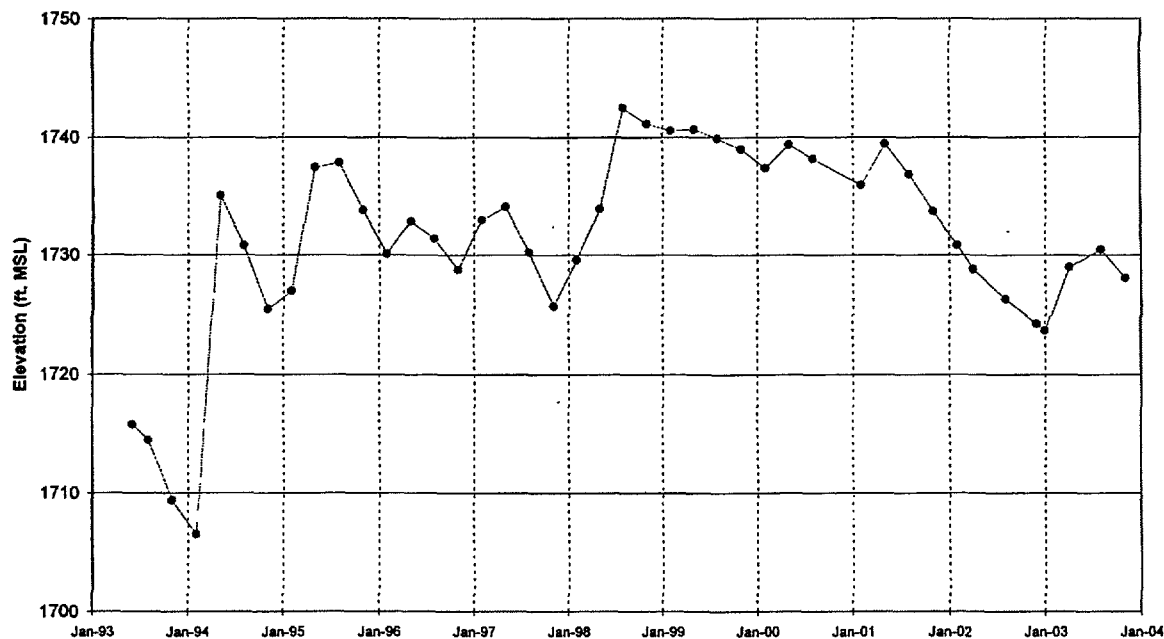
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-45A
Figure A-153



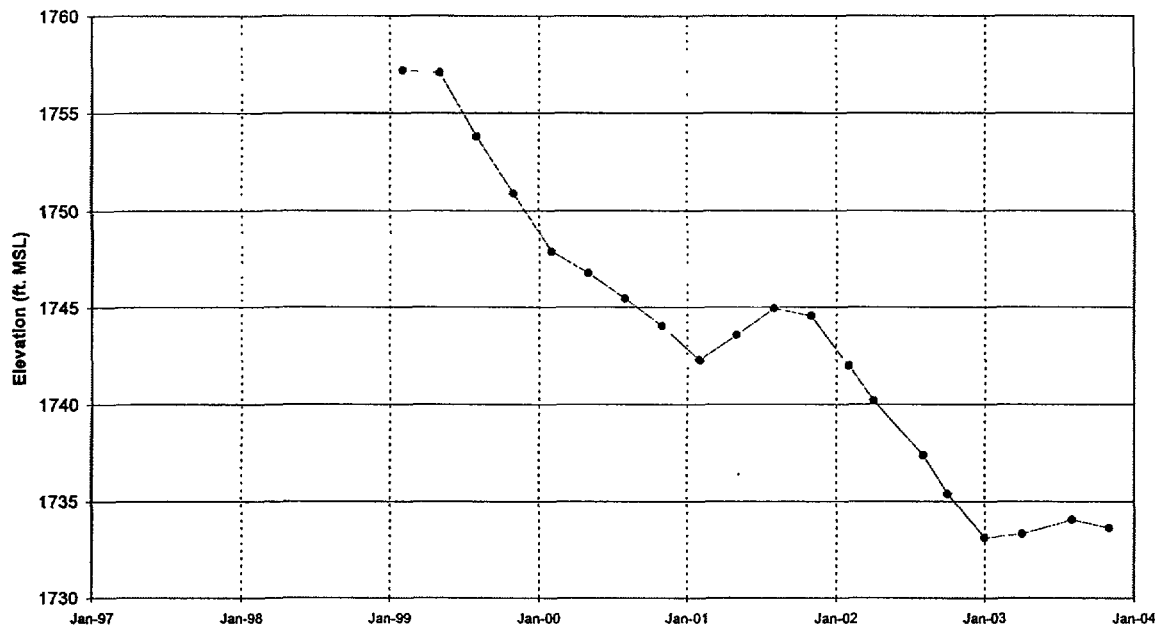
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-45B
Figure A-154



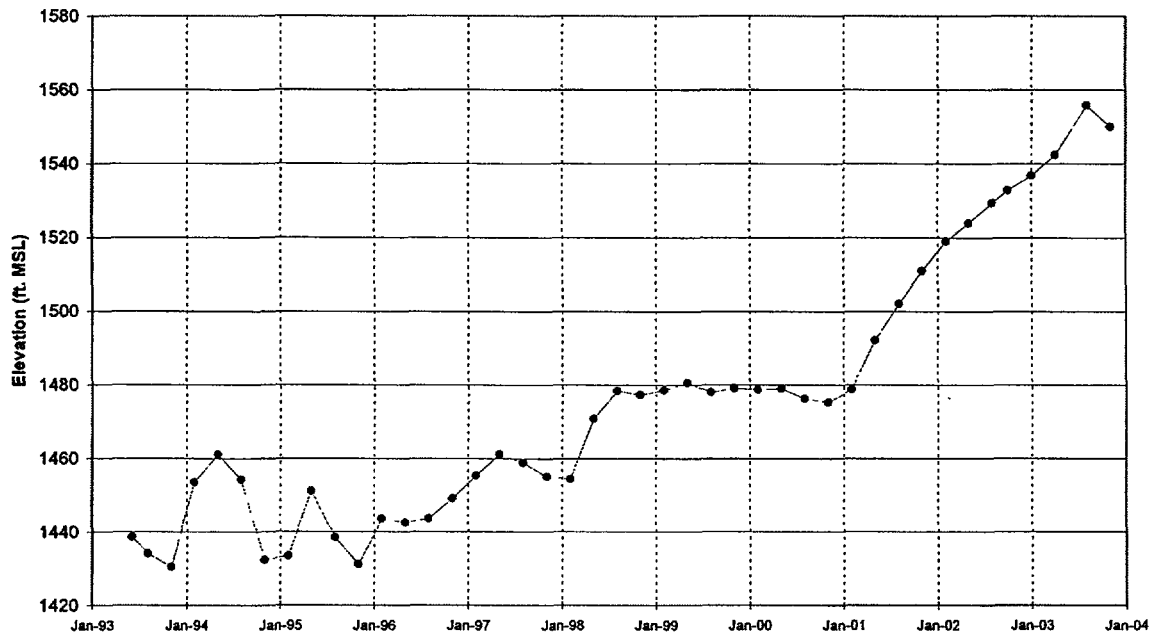
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-45C
Figure A-155



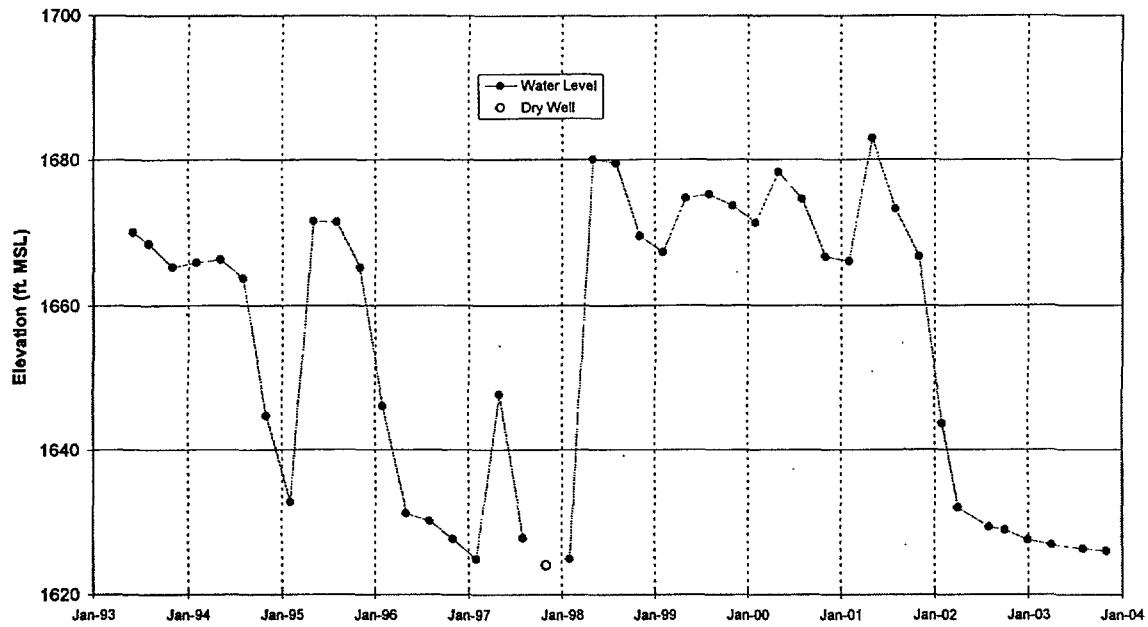
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-46A
Figure A-156



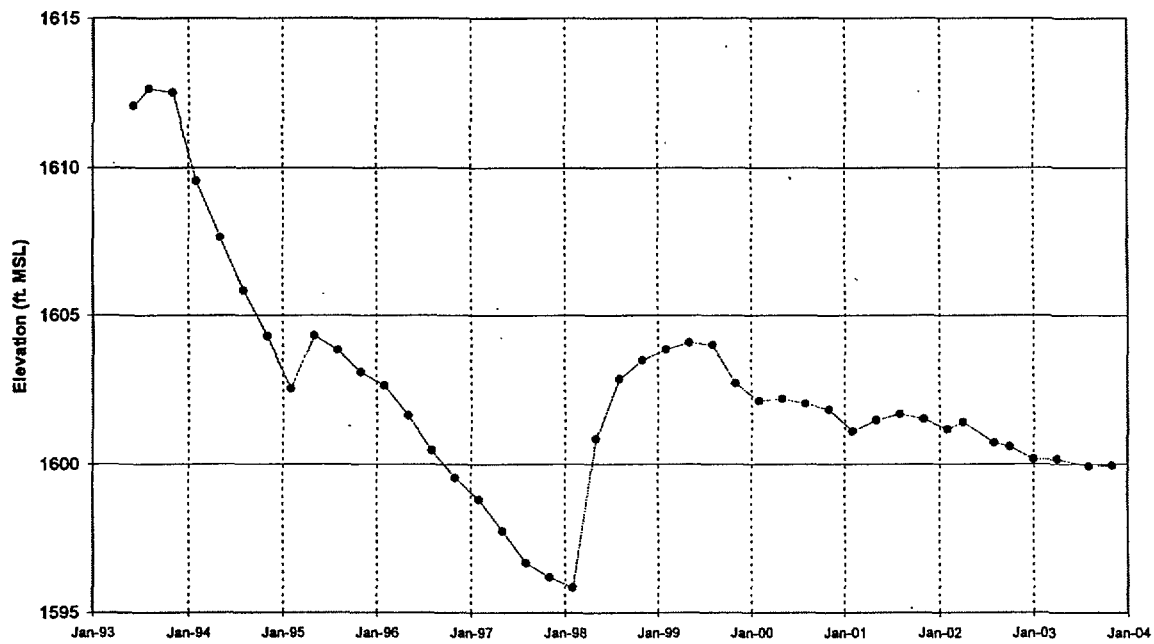
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-46B
Figure A-157



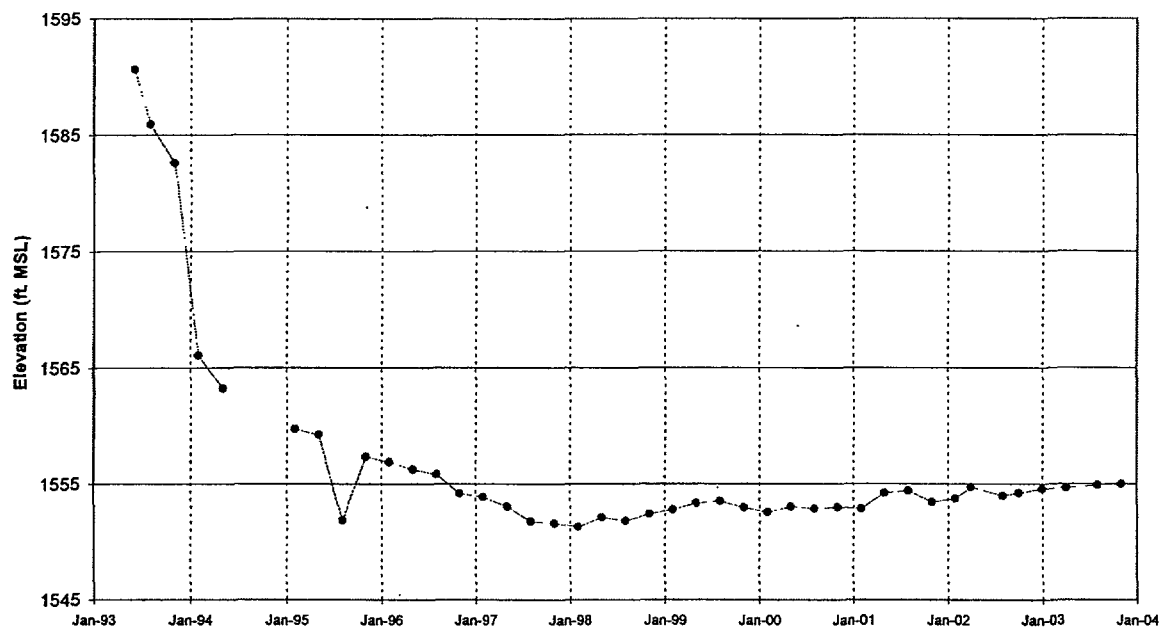
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-47
Figure A-158



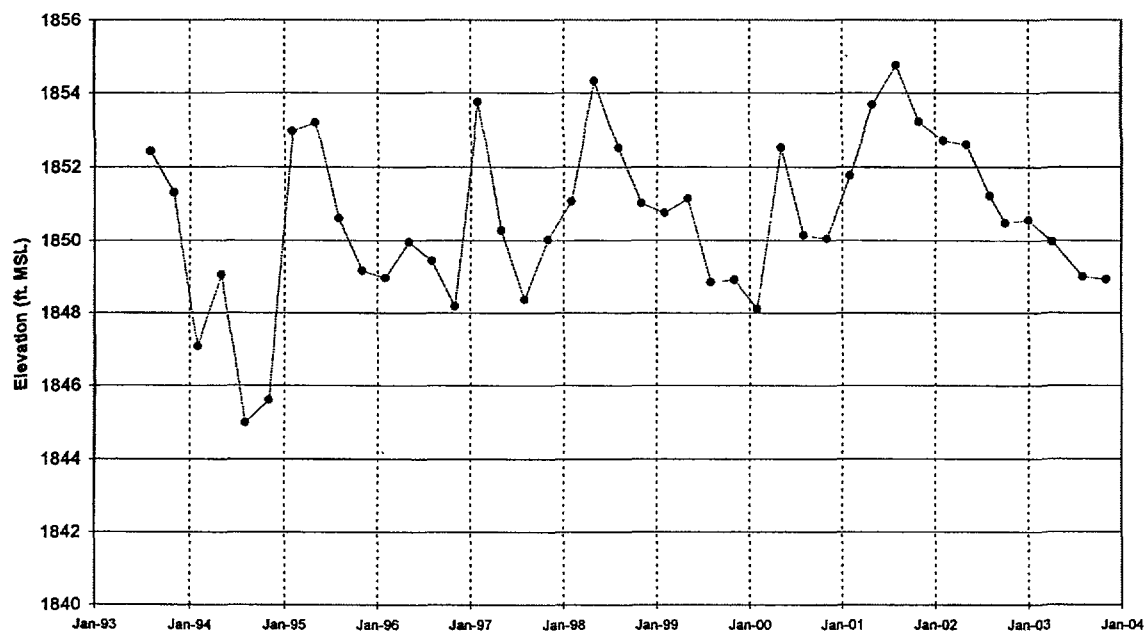
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-48A
Figure A-159



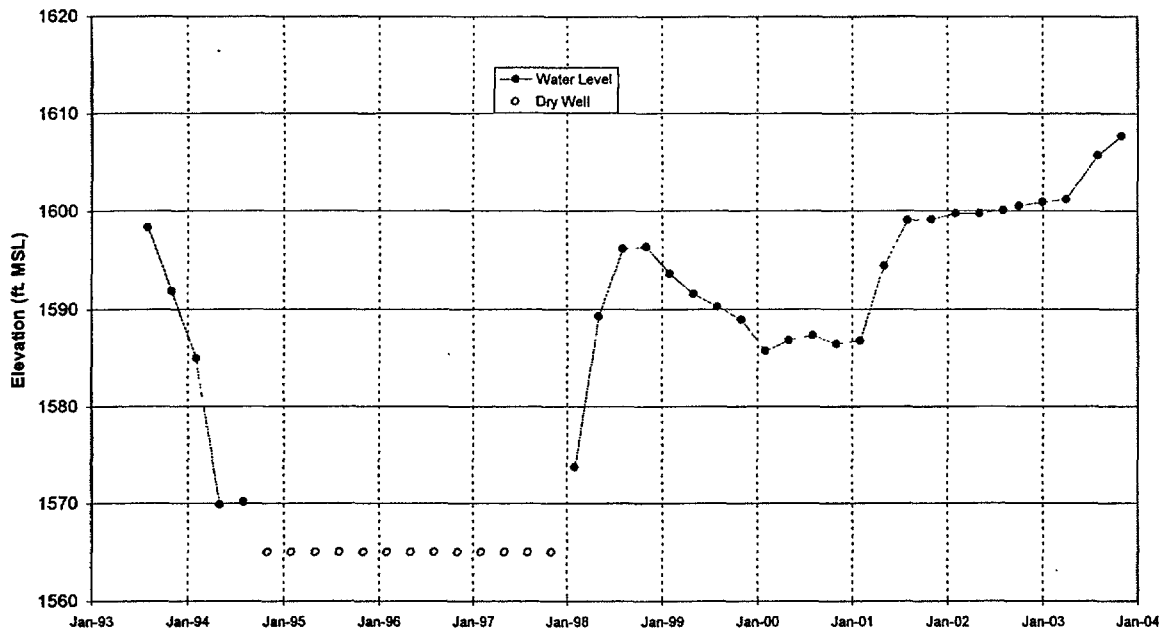
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-48B
Figure A-160



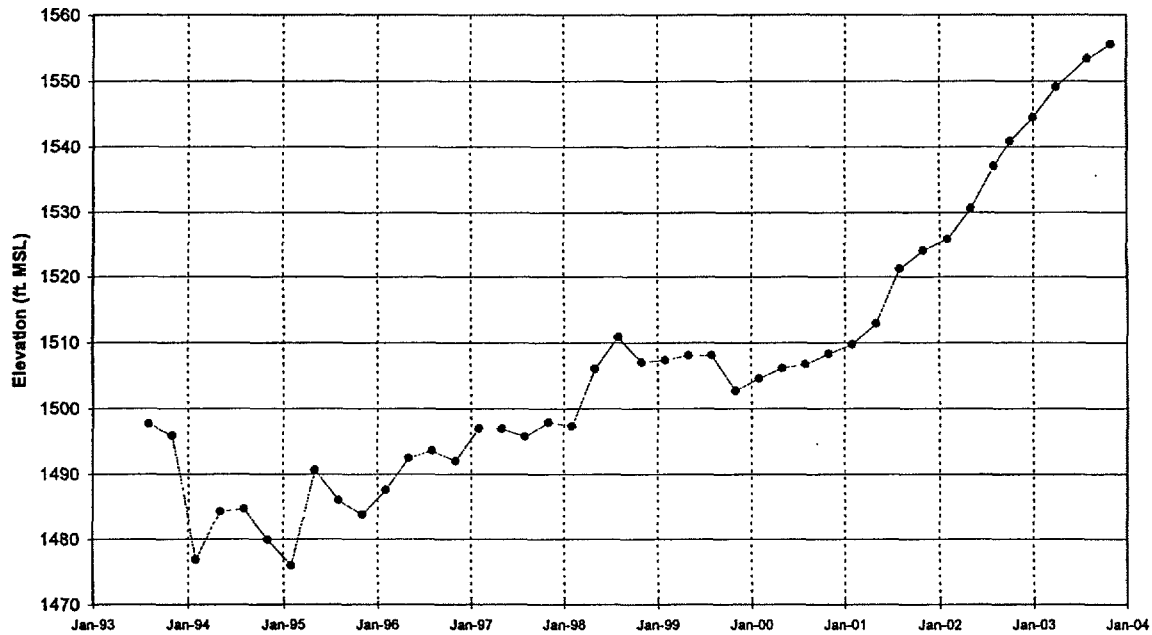
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-48C
Figure A-161



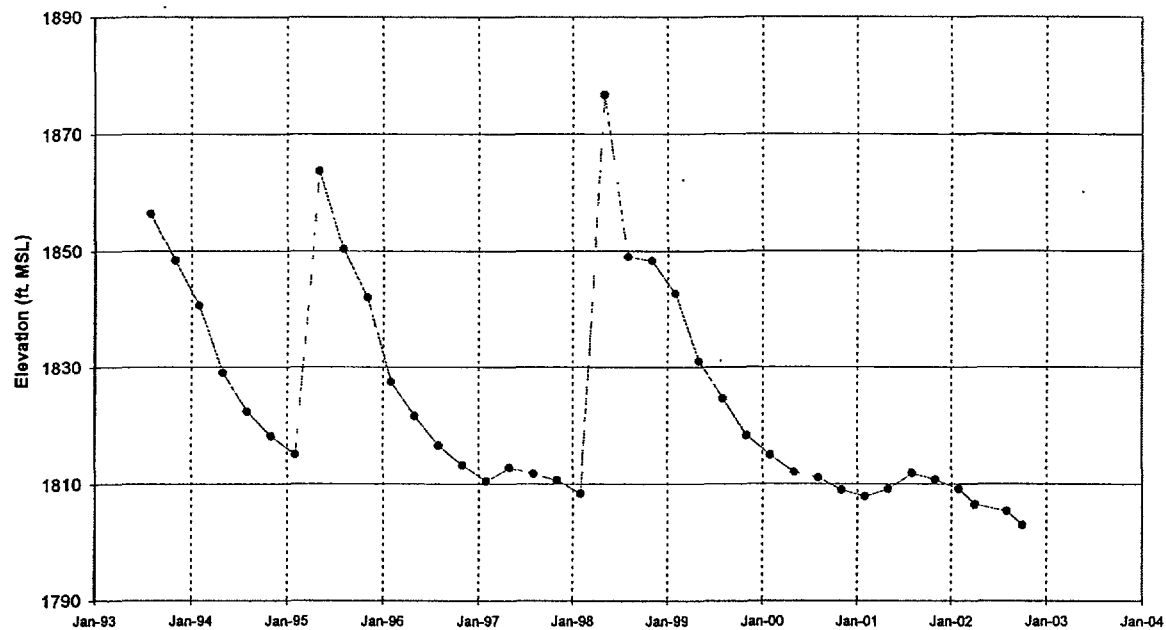
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-49A
Figure A-162



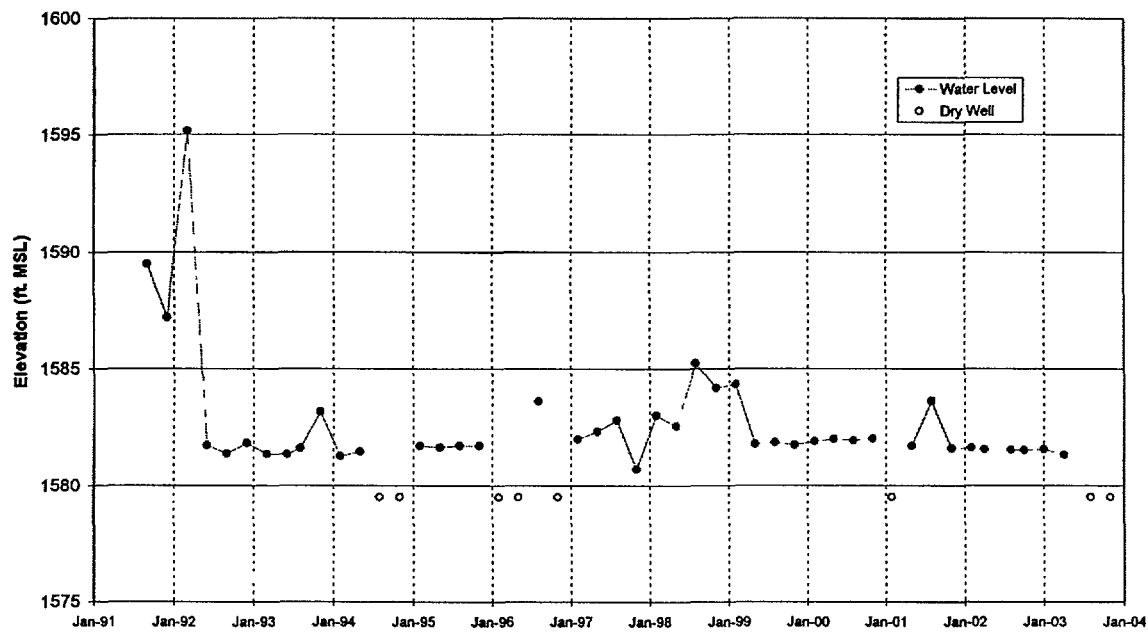
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-49B
Figure A-163



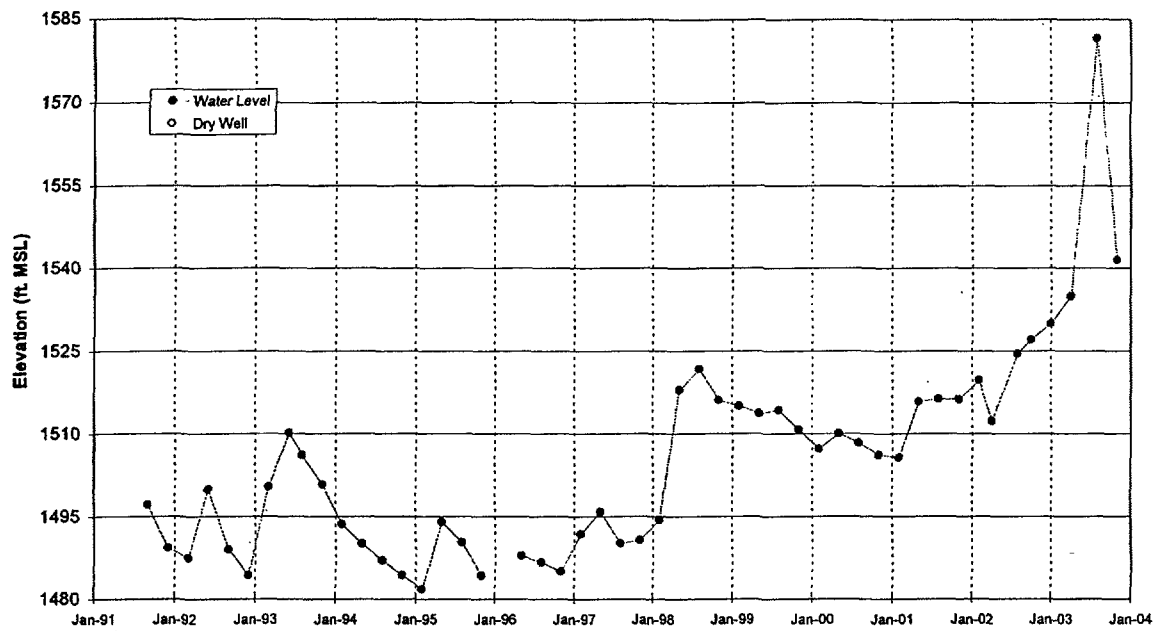
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-49C
Figure A-164



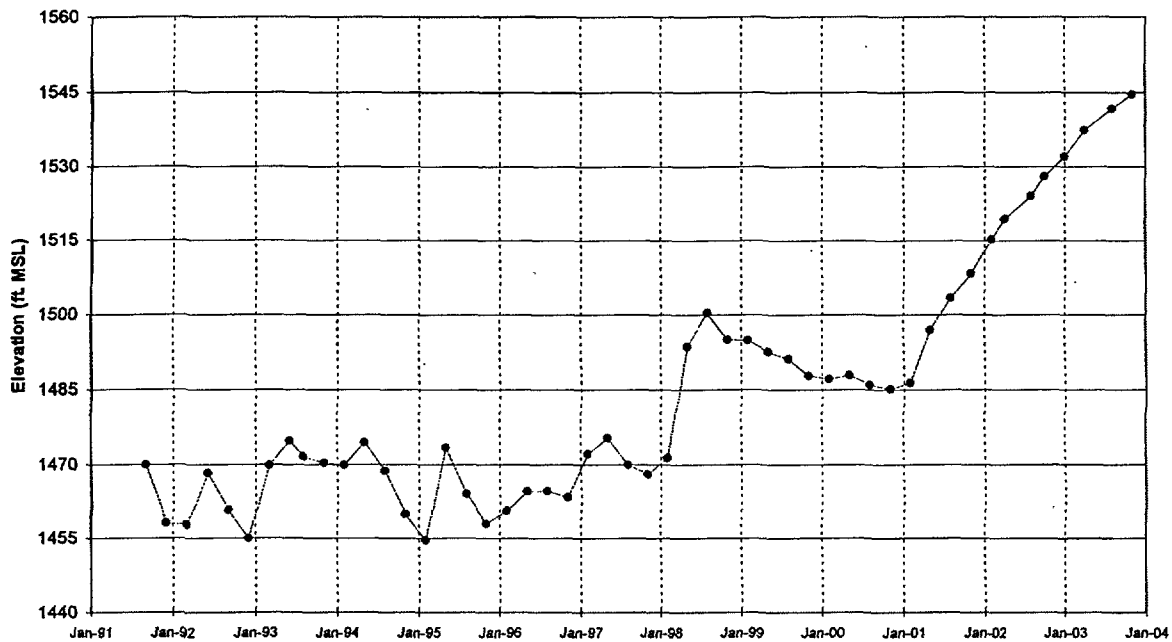
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-50
Figure A-165



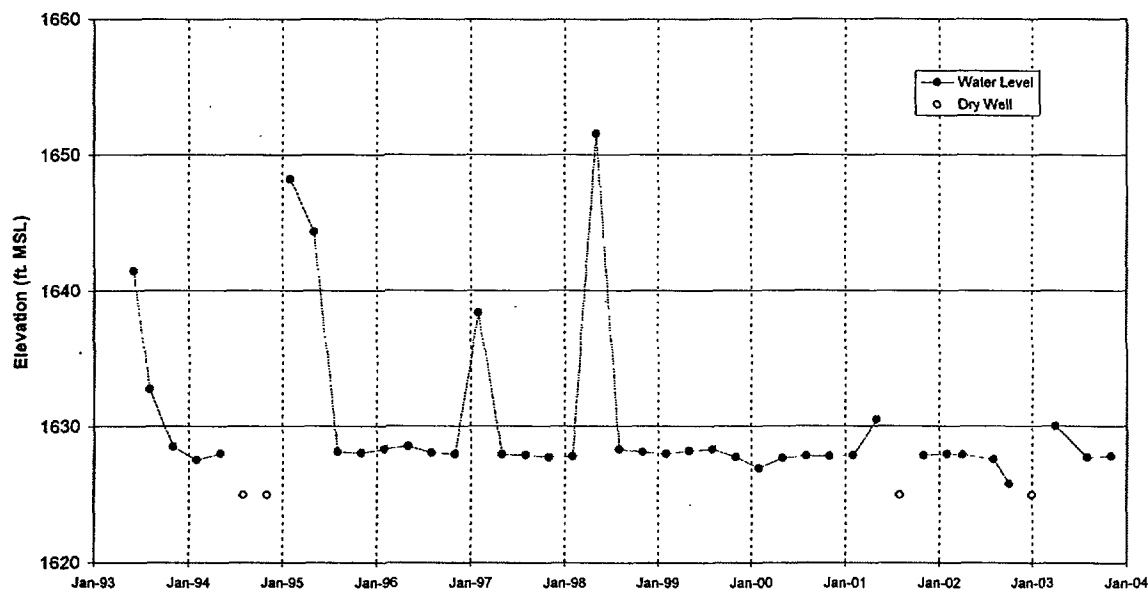
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-51A
Figure A-166



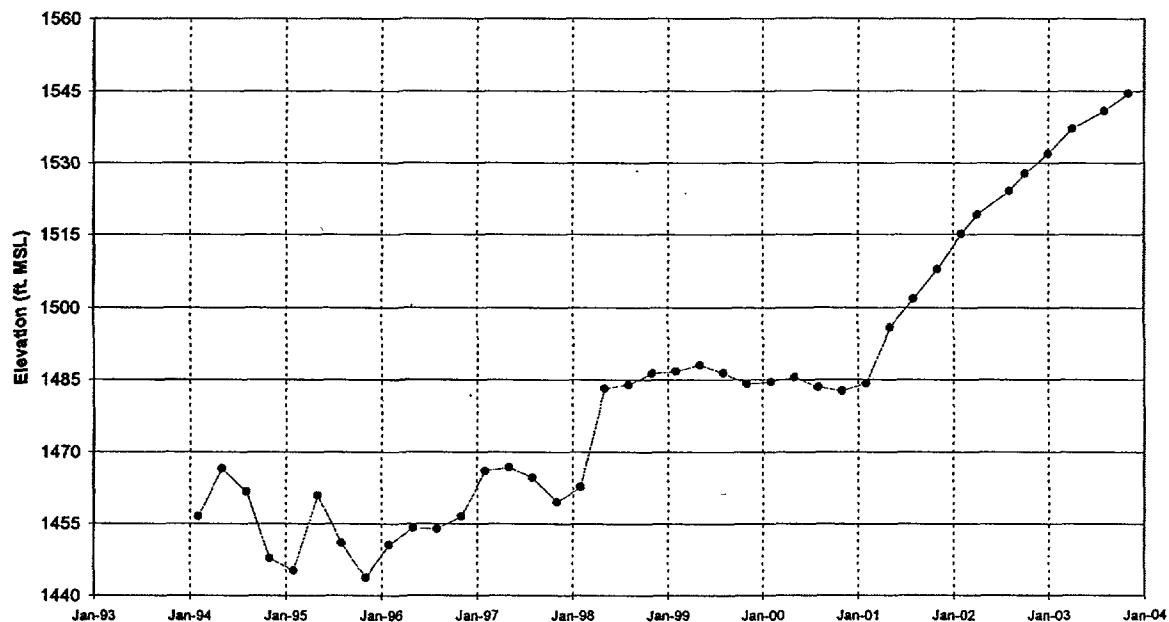
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-51B
Figure A-167



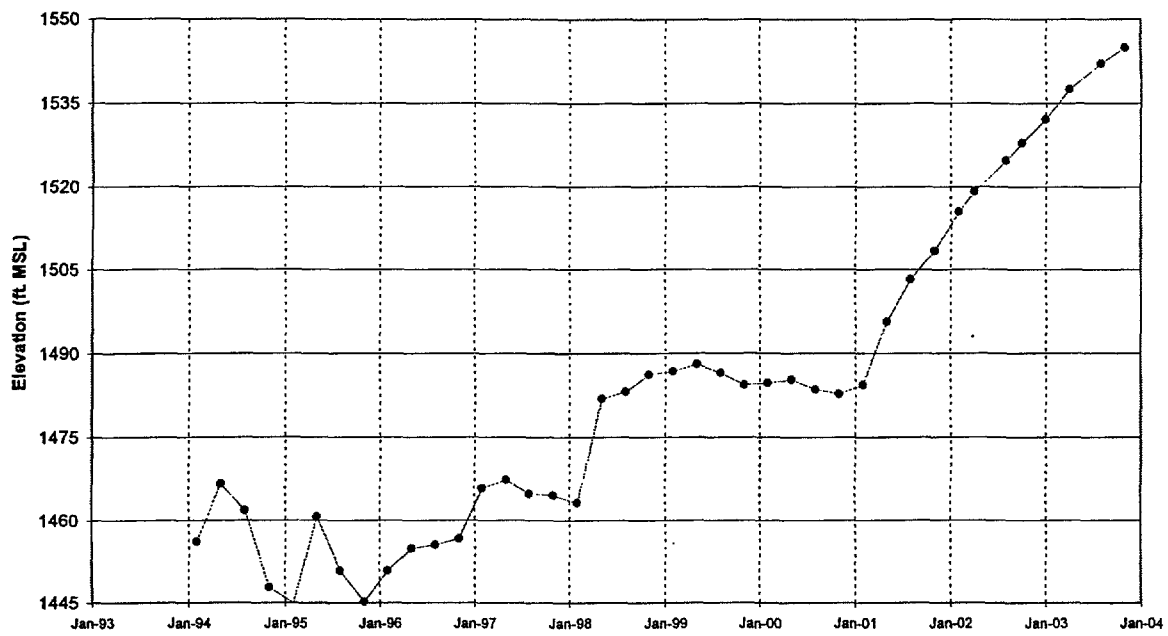
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-51C
Figure A-168



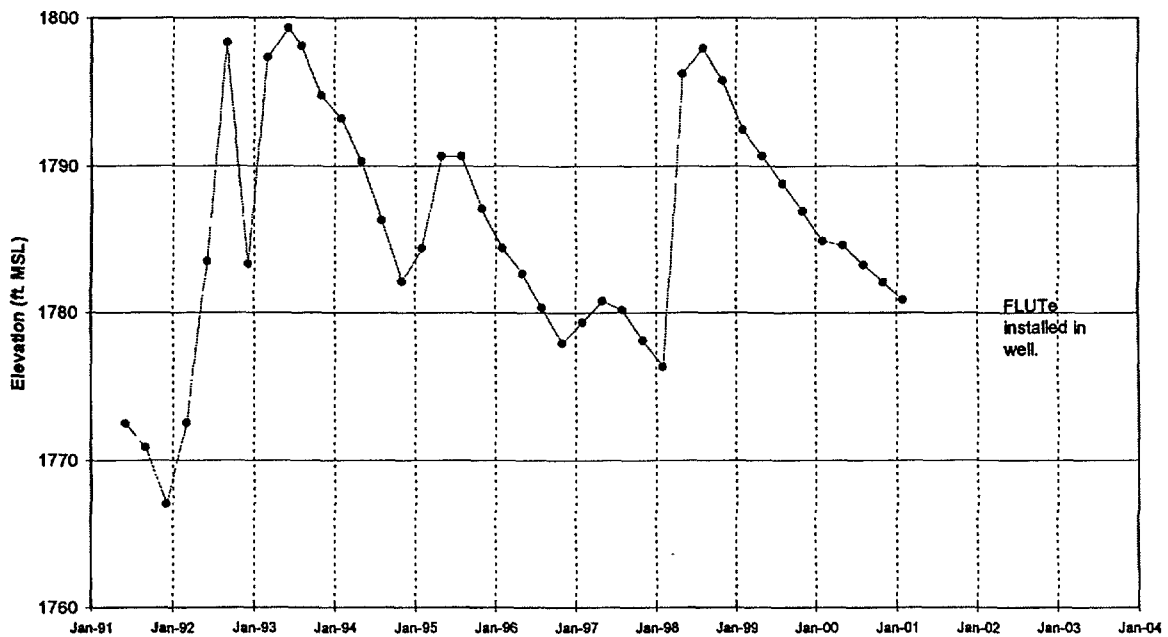
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-52A
Figure A-169



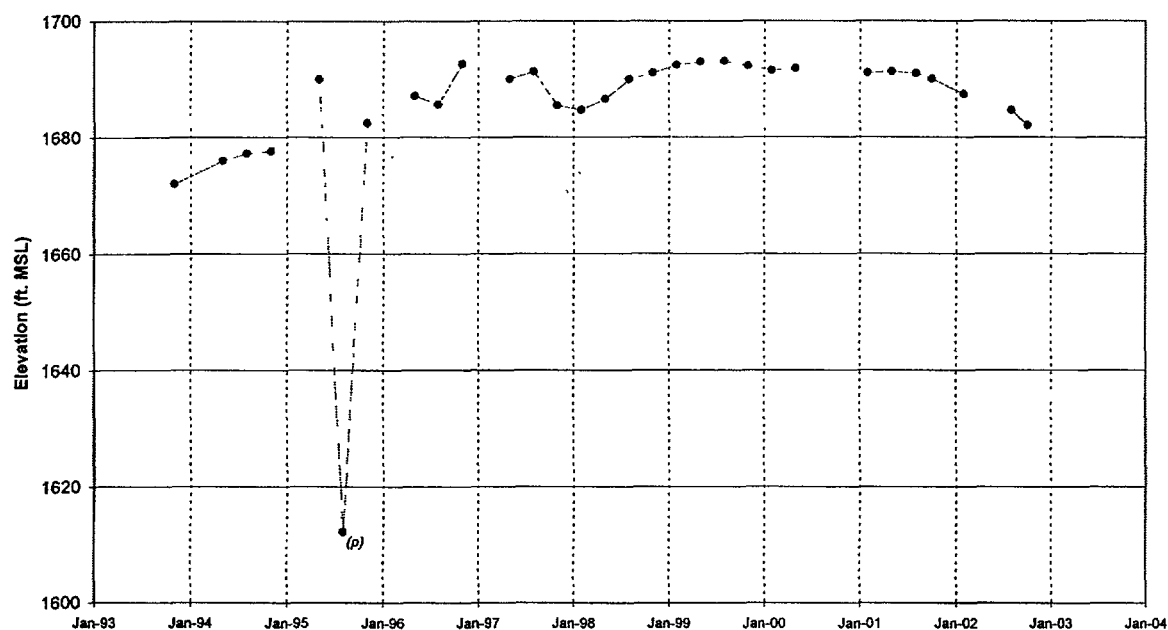
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-52B
Figure A-170



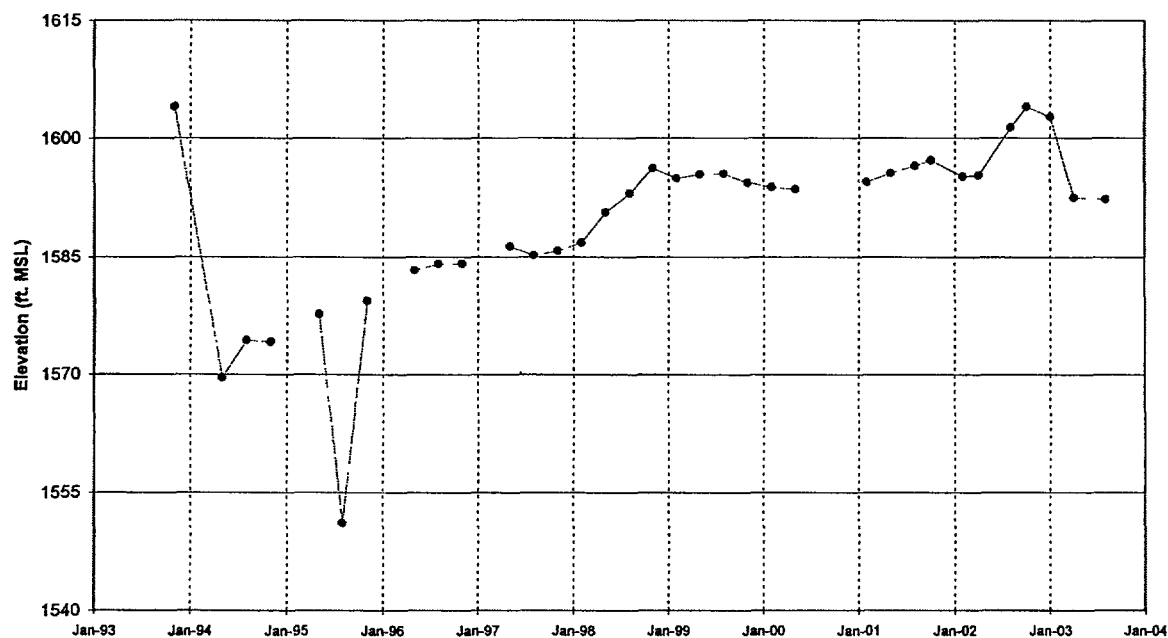
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-52C
Figure A-171



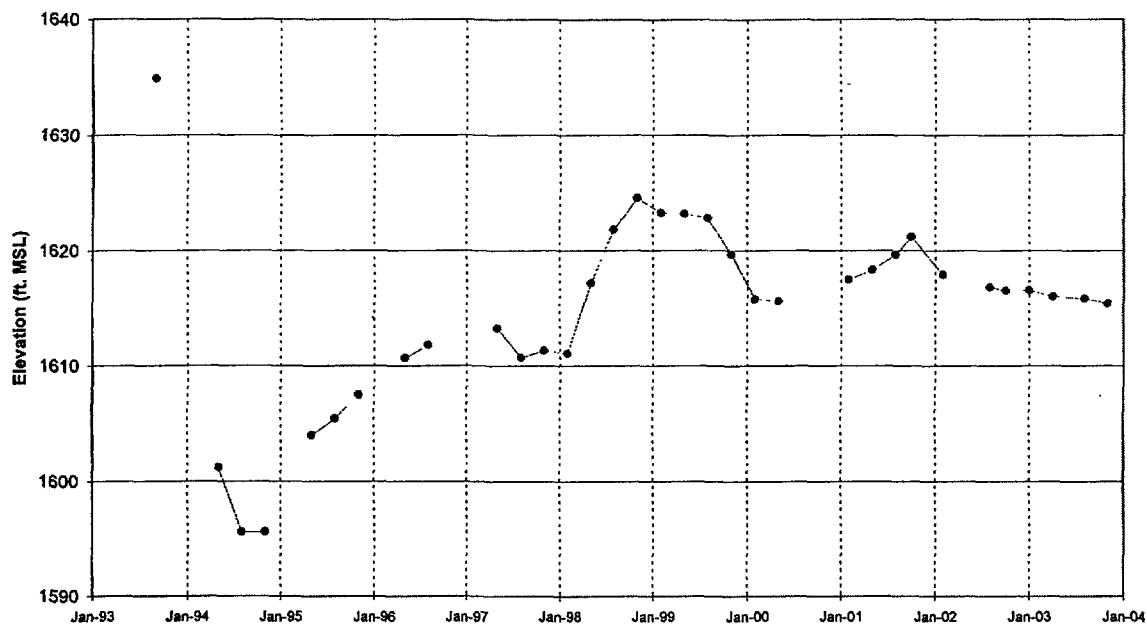
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-53
Figure A-172



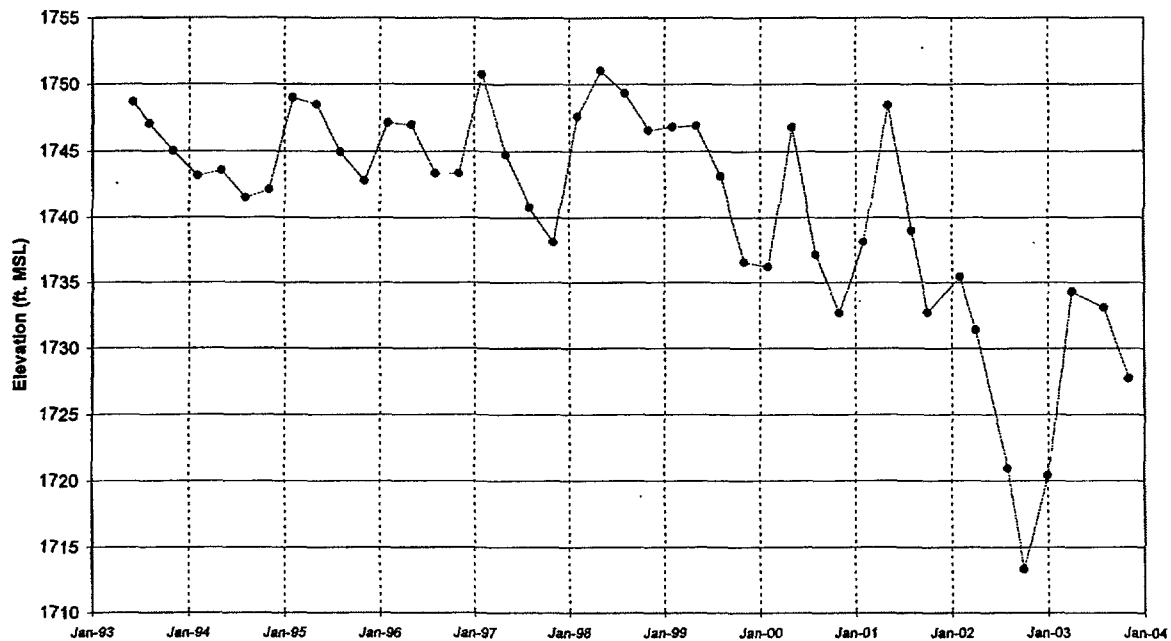
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-54A
Figure A-173



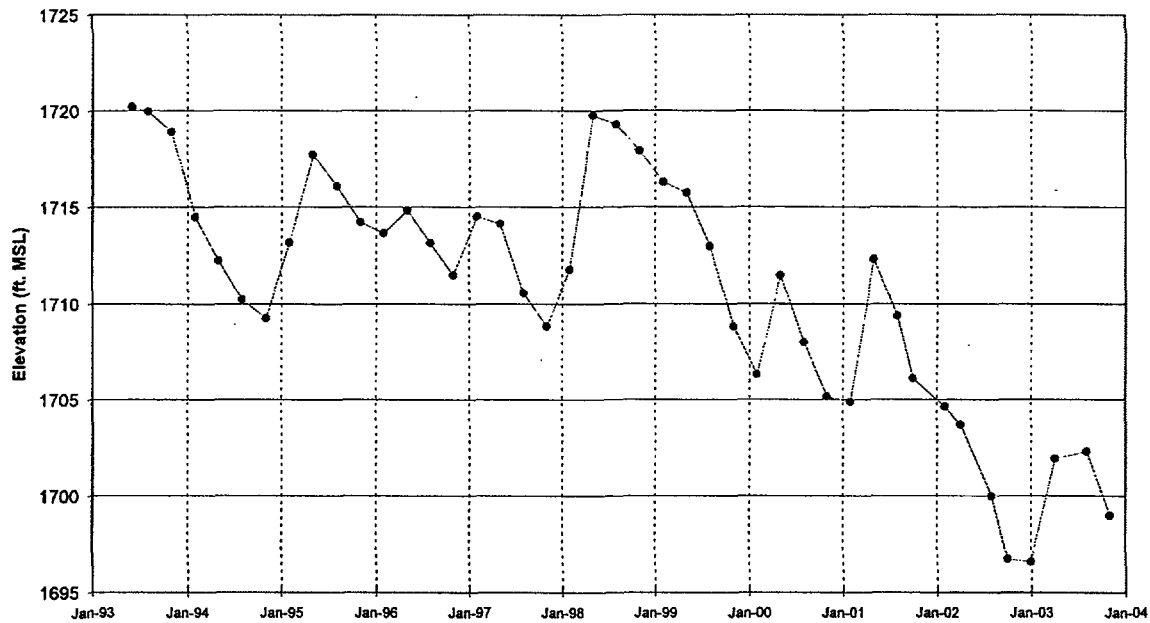
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-54B
Figure A-174



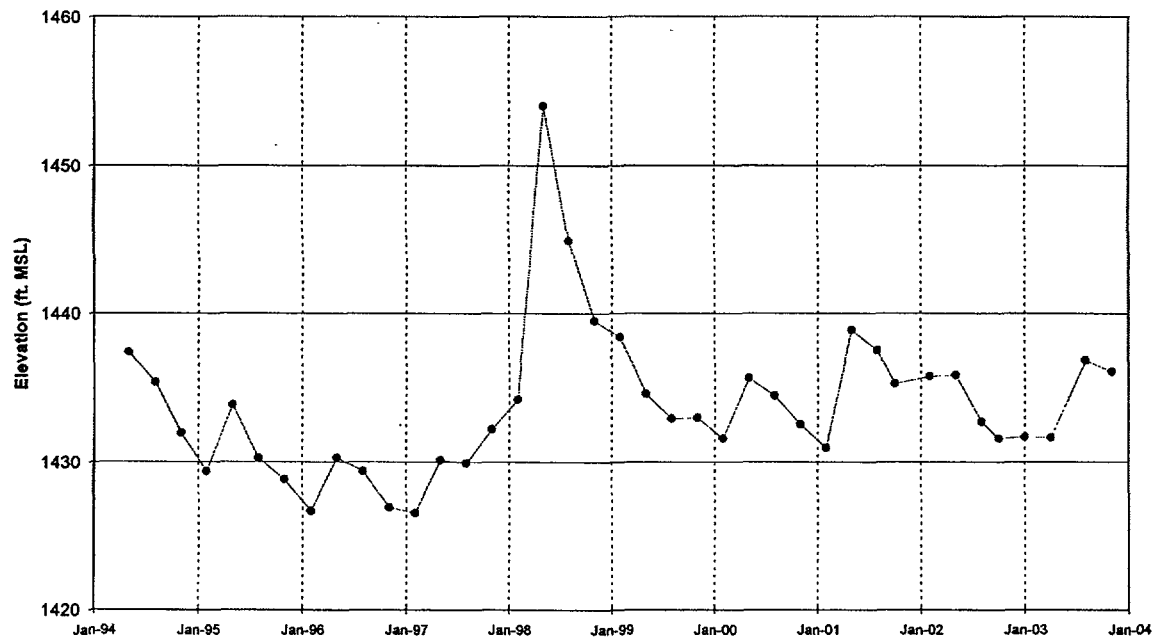
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-54C
Figure A-175



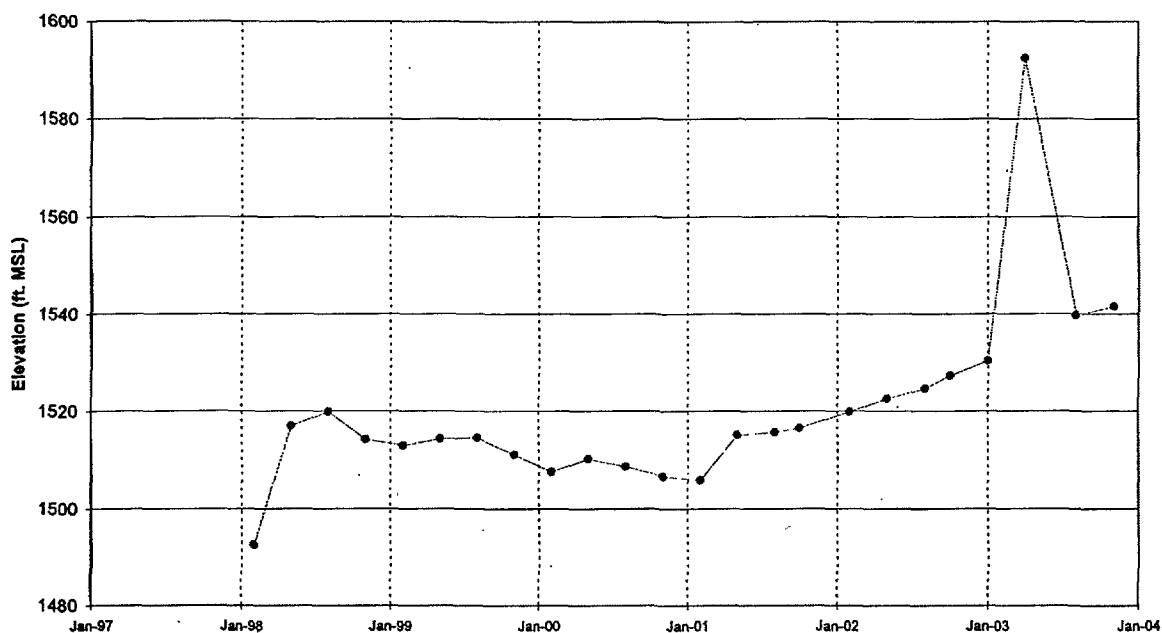
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-55A
Figure A-176



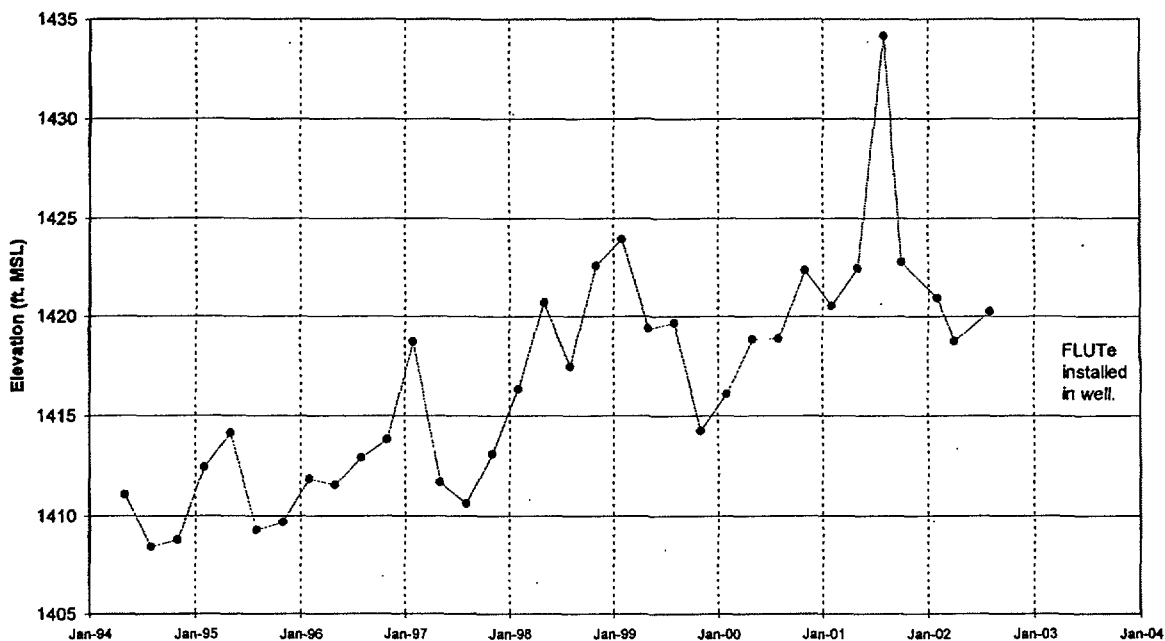
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-55B
Figure A-177



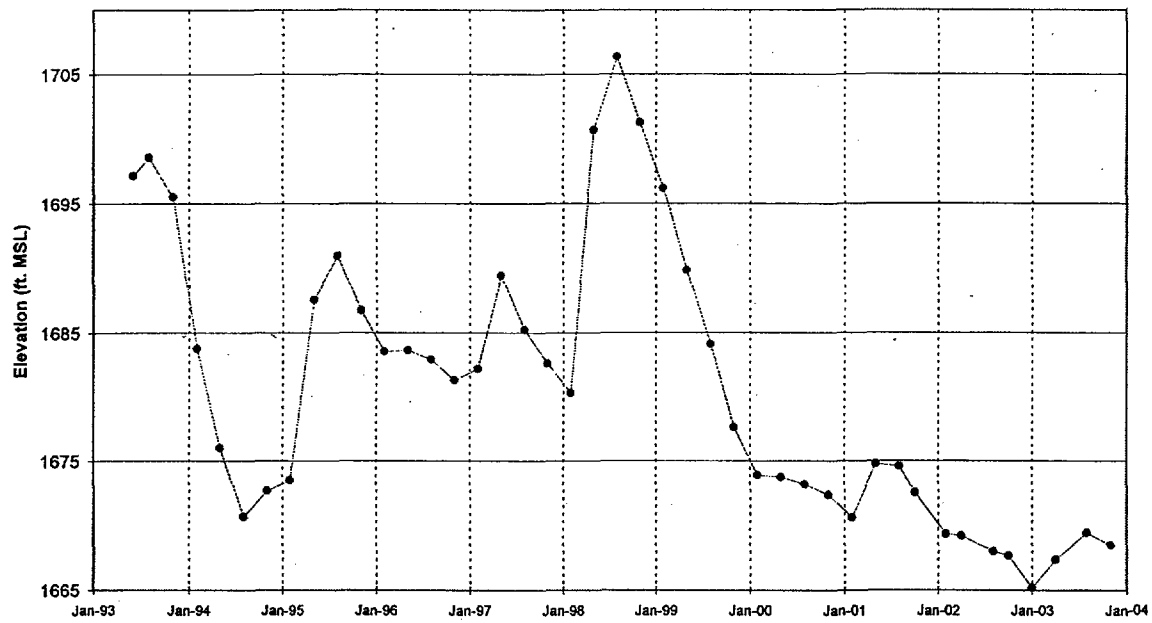
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-56A
Figure A-178



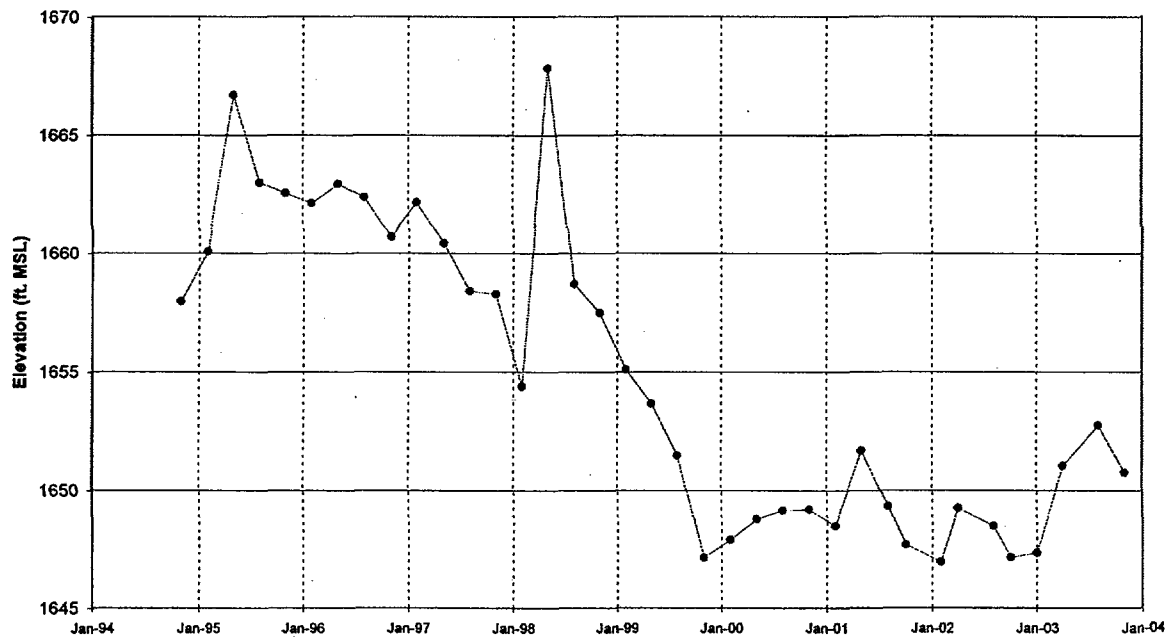
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-56B
Figure A-179



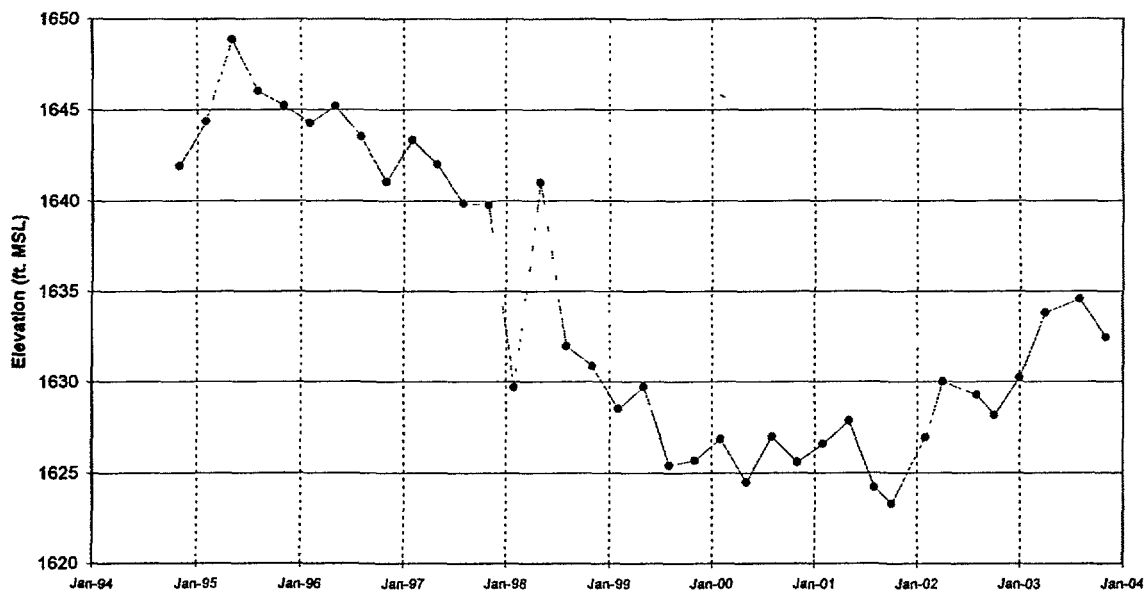
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-57
Figure A-180



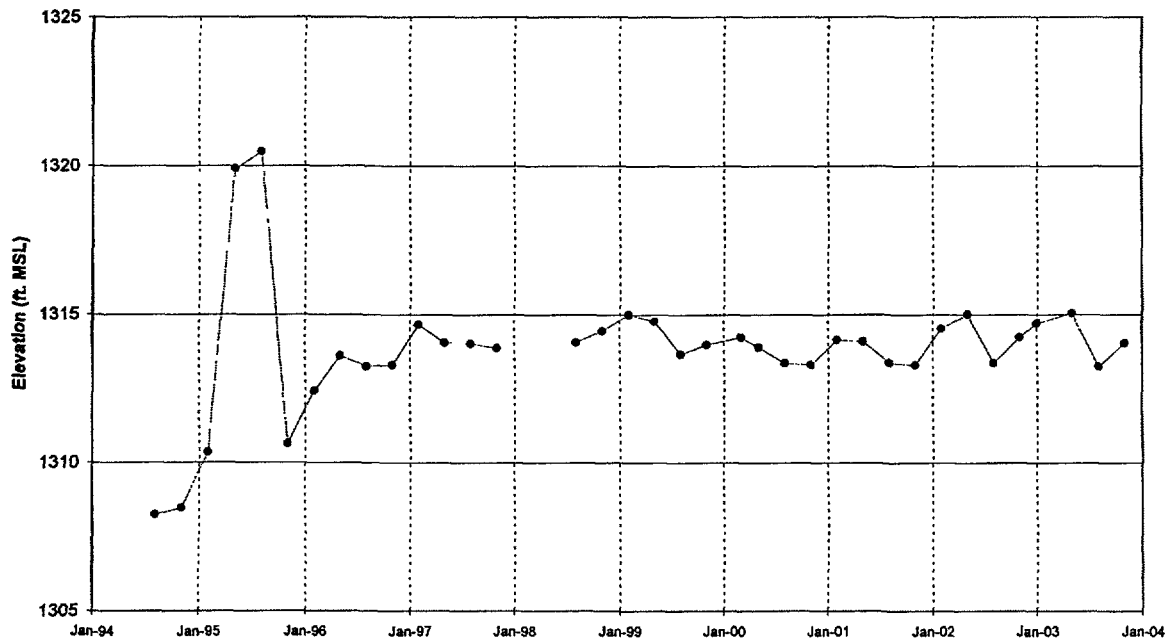
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-58A
Figure A-181



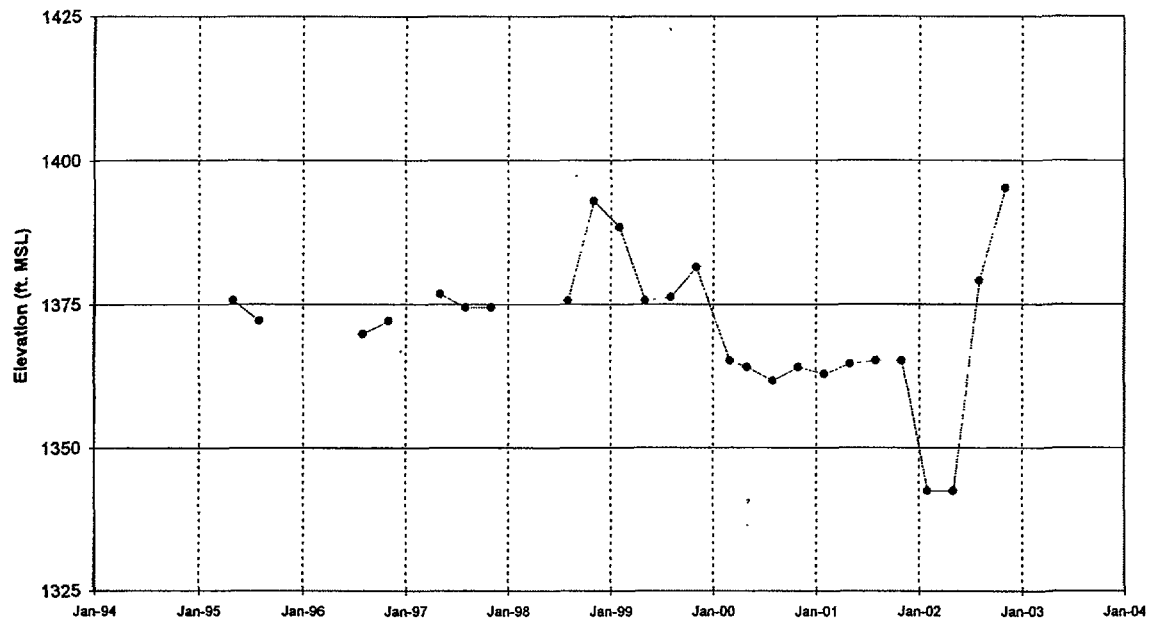
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-58B
Figure A-182



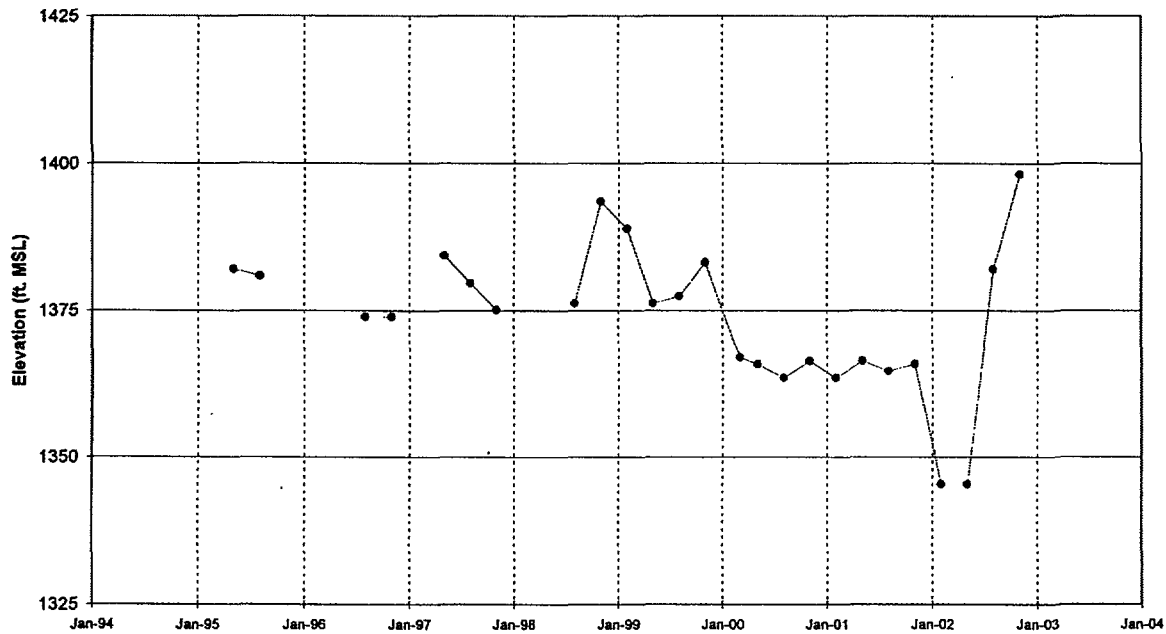
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-58C
Figure A-183



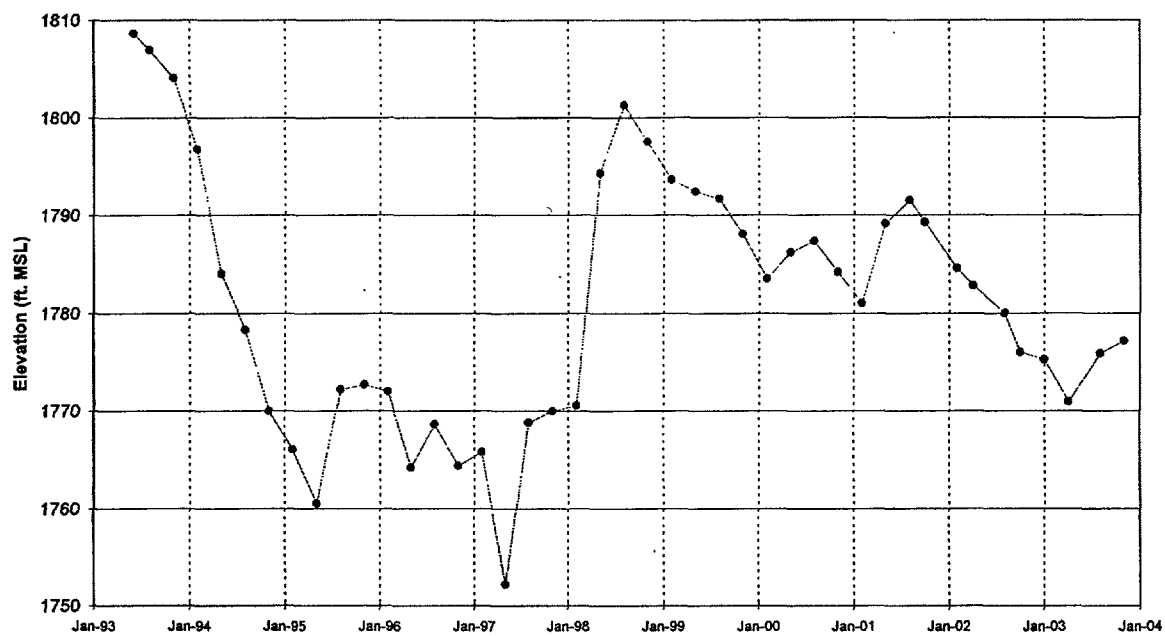
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-59A
Figure A-184



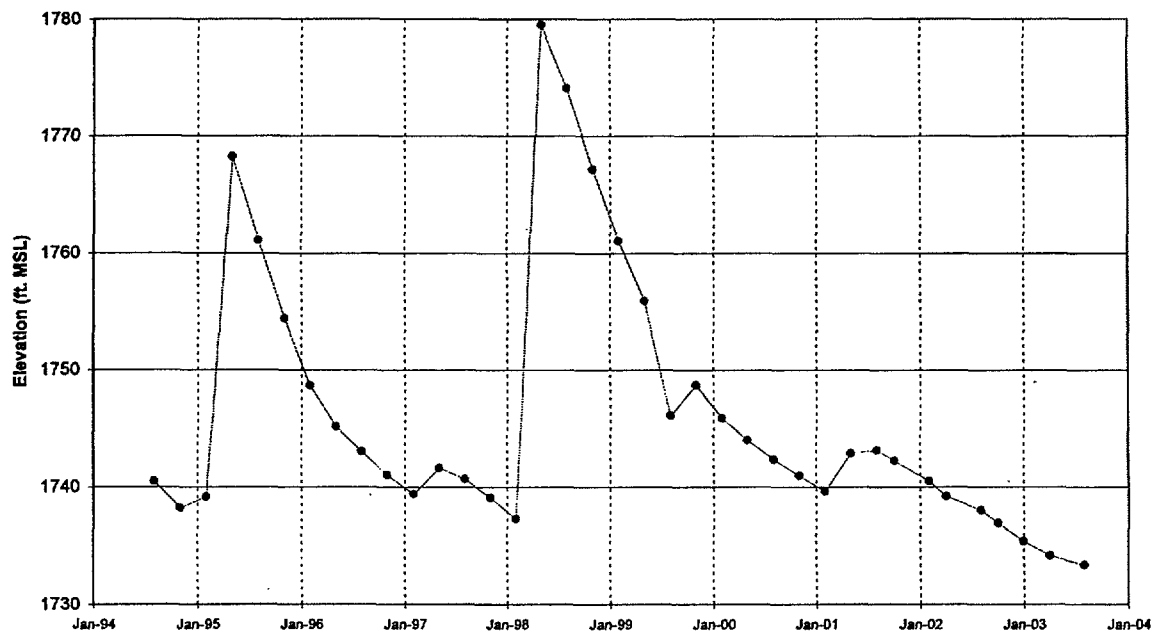
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-59B
Figure A-185



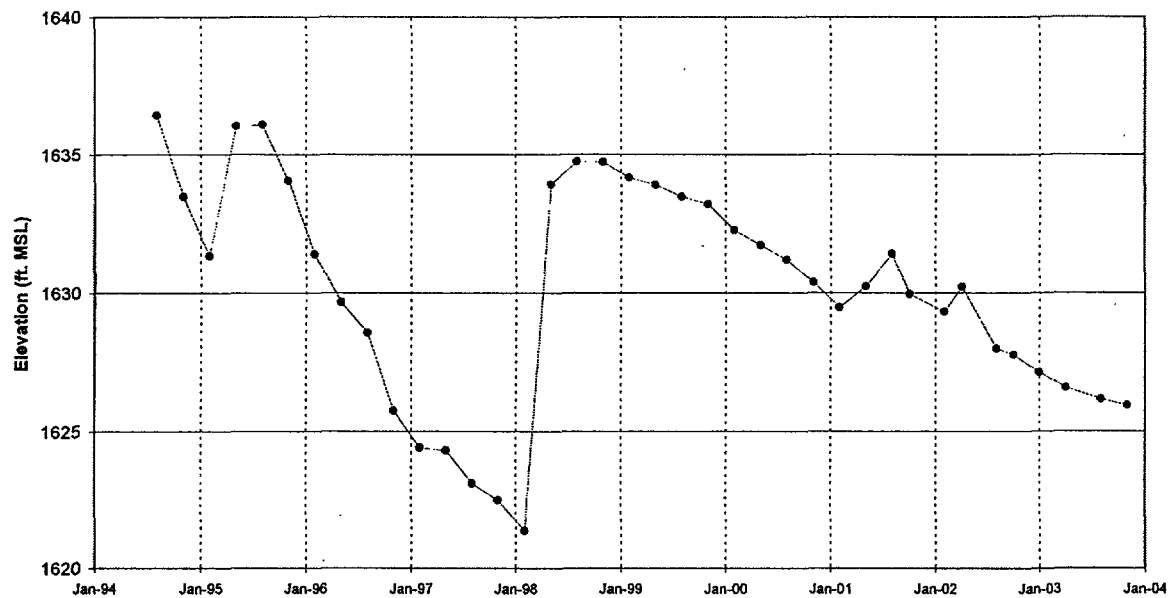
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-59C
Figure A-186



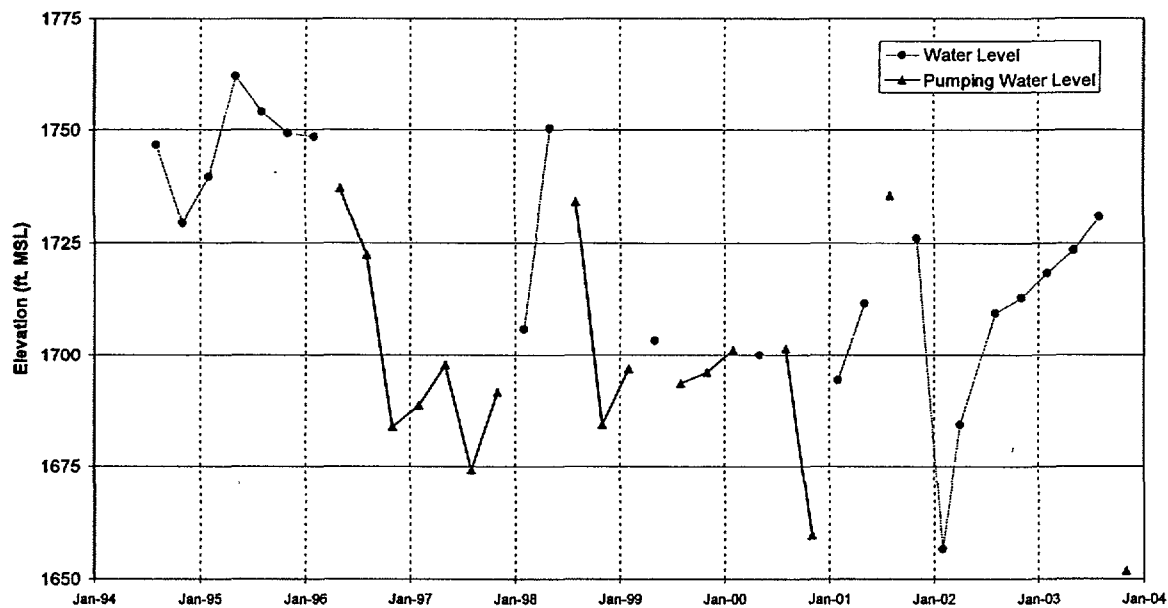
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-60
Figure A-187



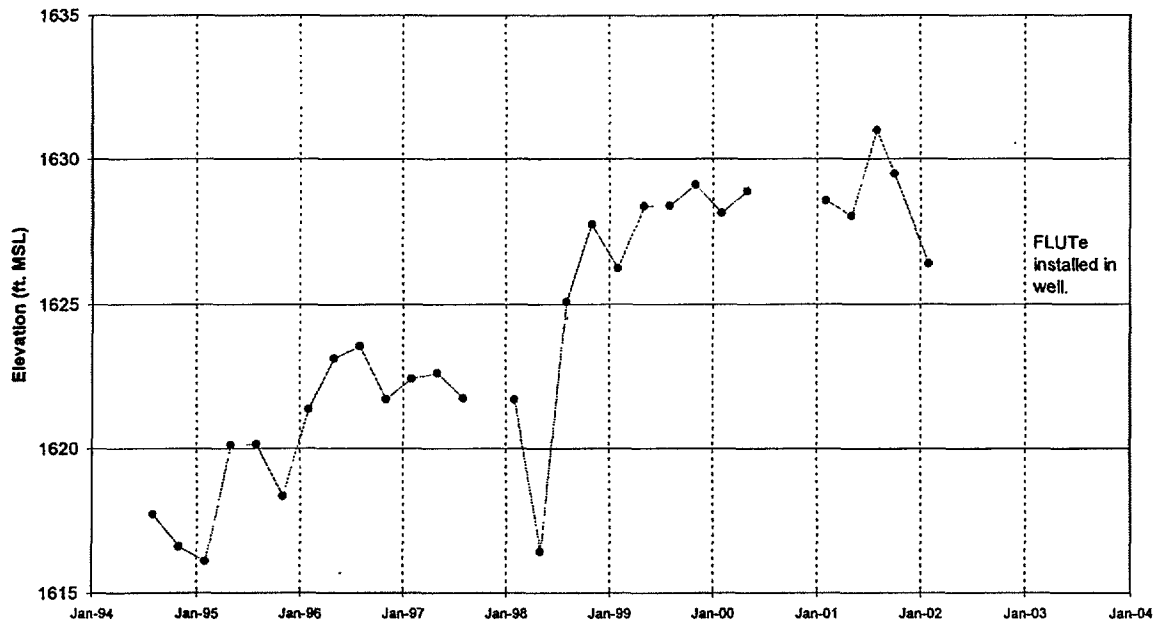
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-61
Figure A-188



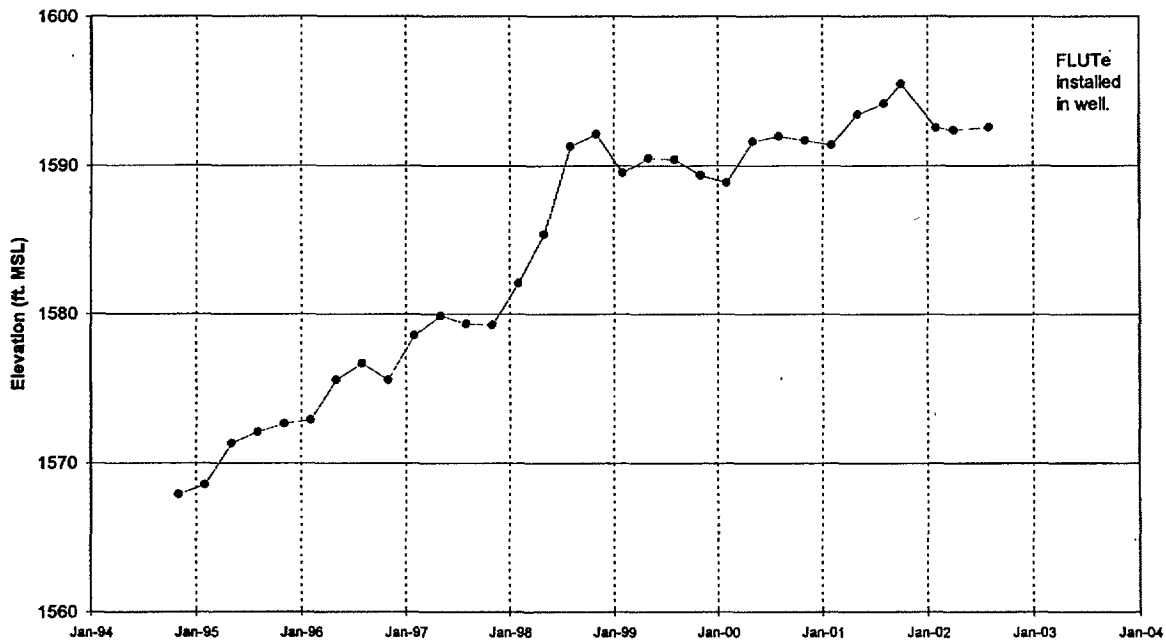
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-62
Figure A-189



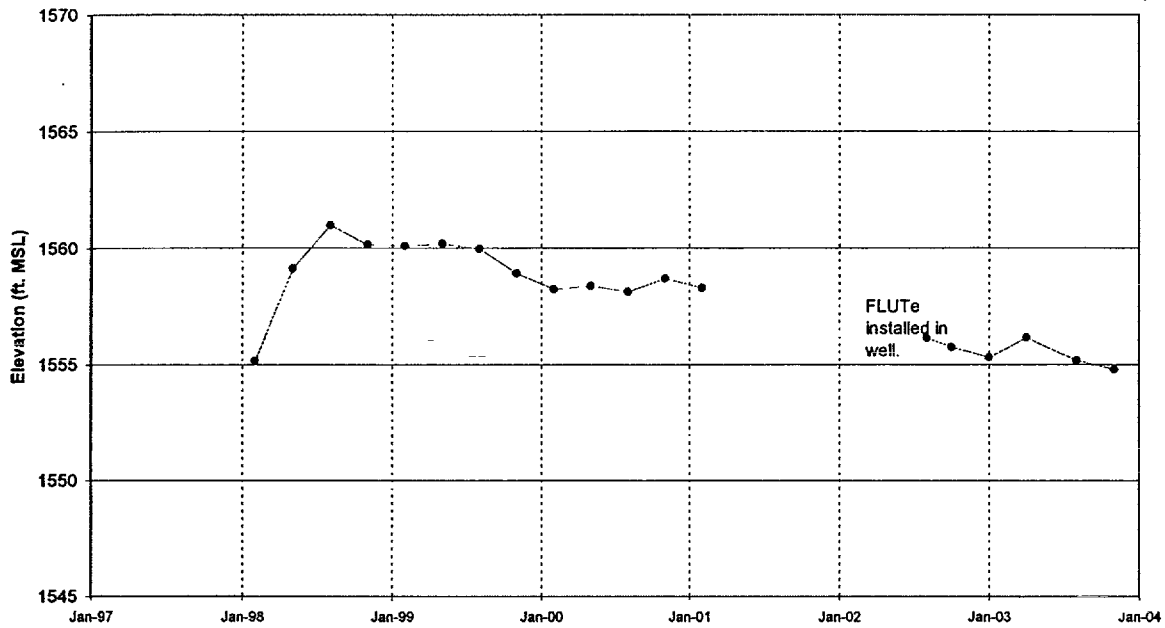
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-63
Figure A-190



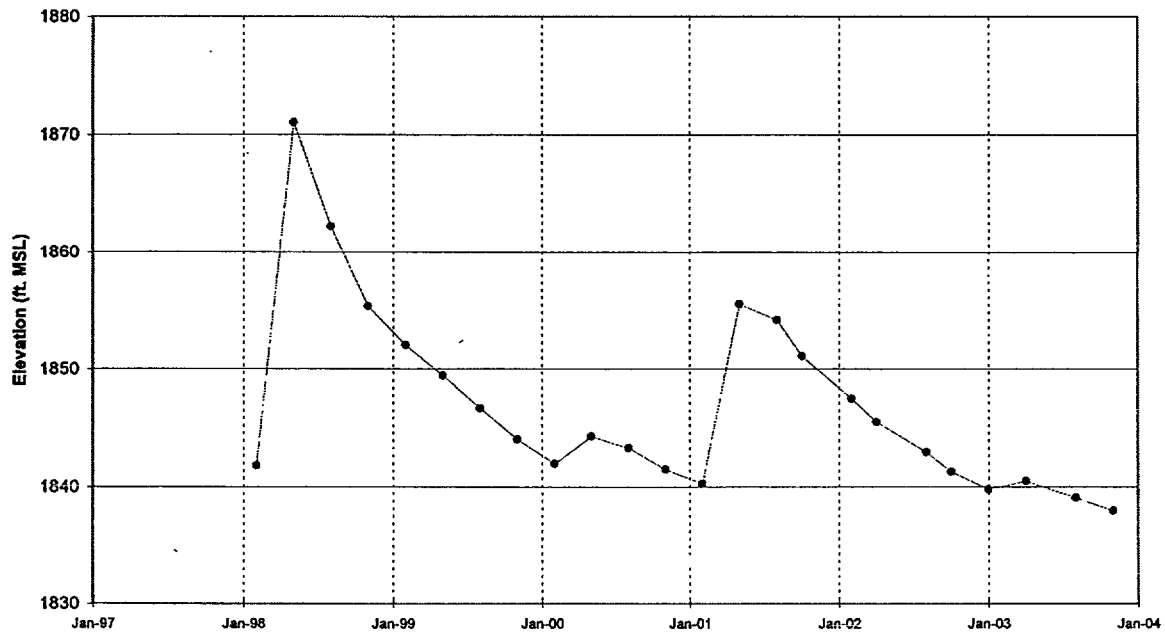
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-64
Figure A-191



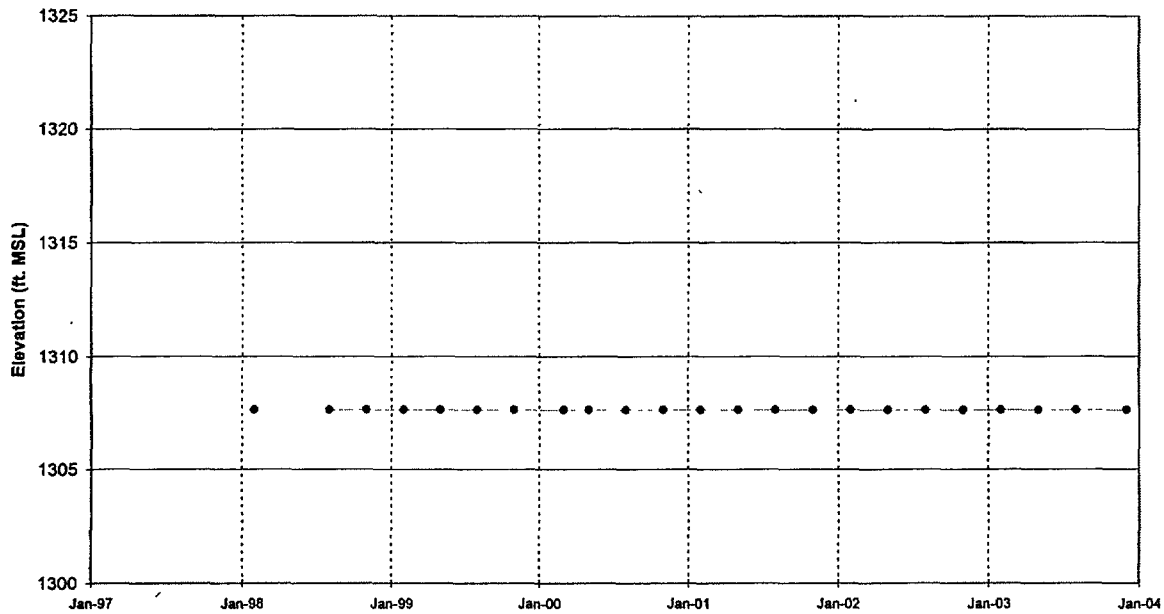
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-65
Figure A-192



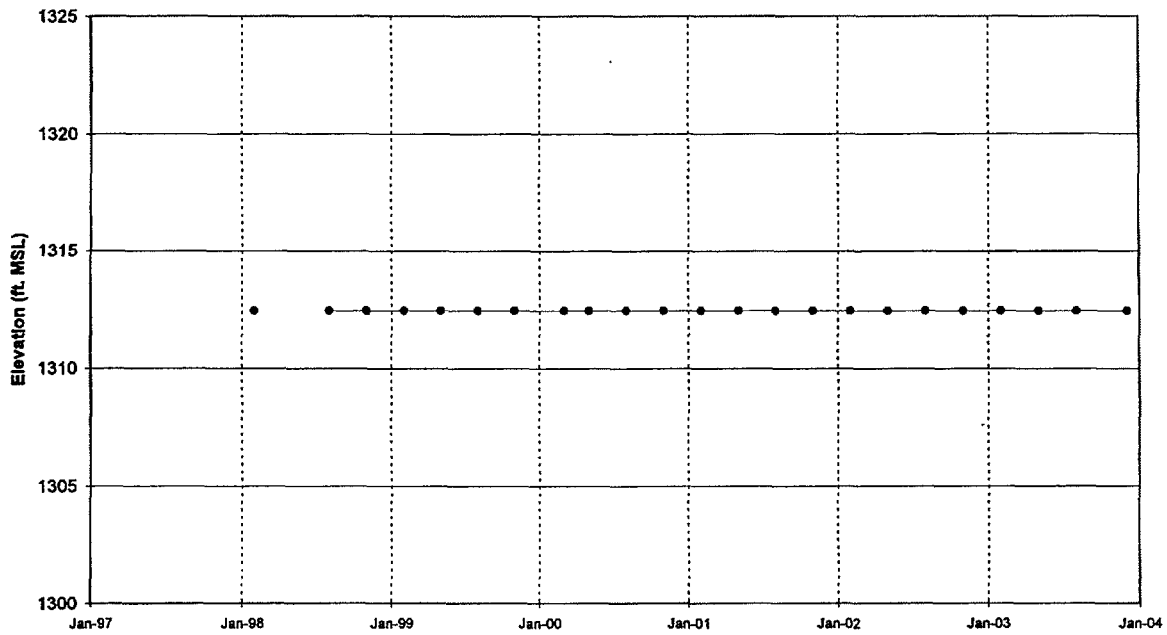
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-66
Figure A-193



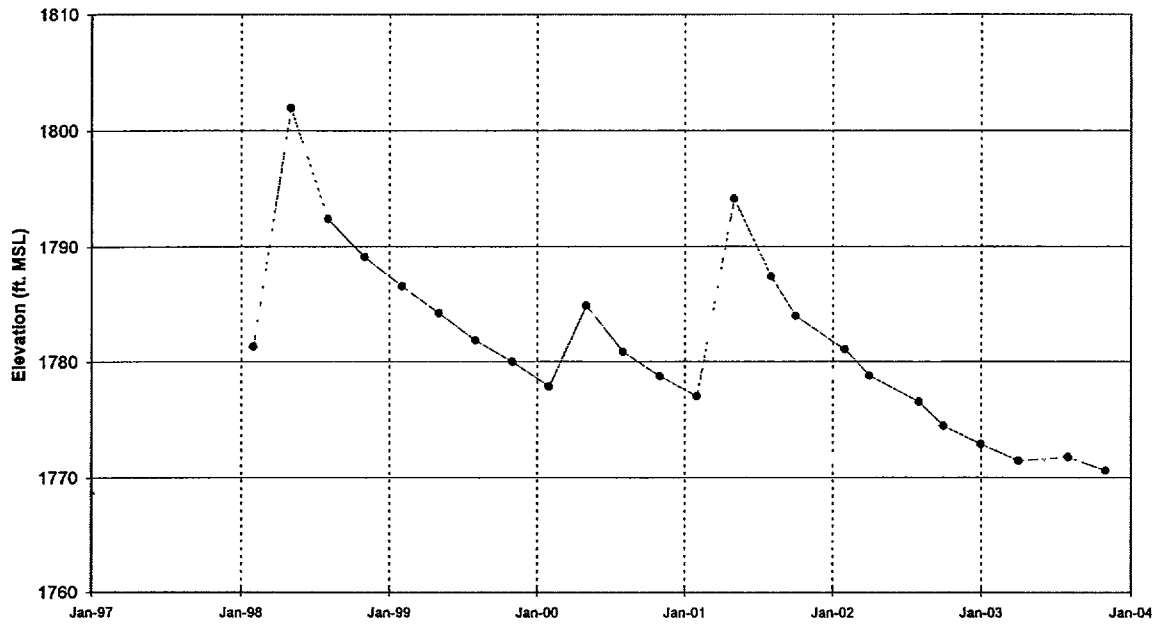
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-67
Figure A-194



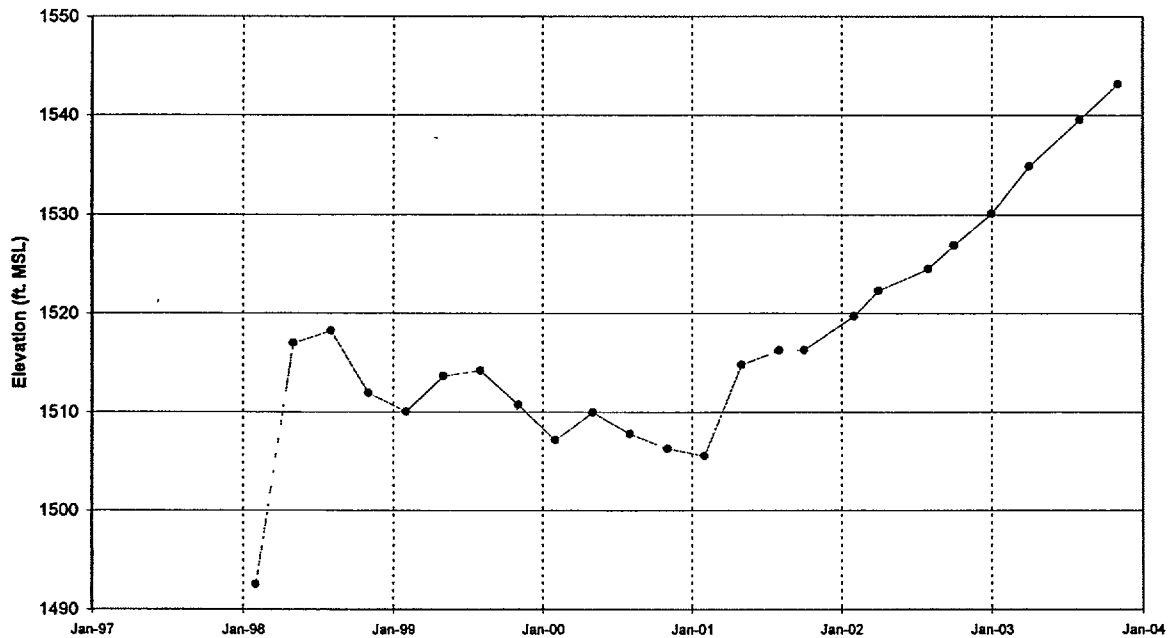
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-68A
Figure A-195



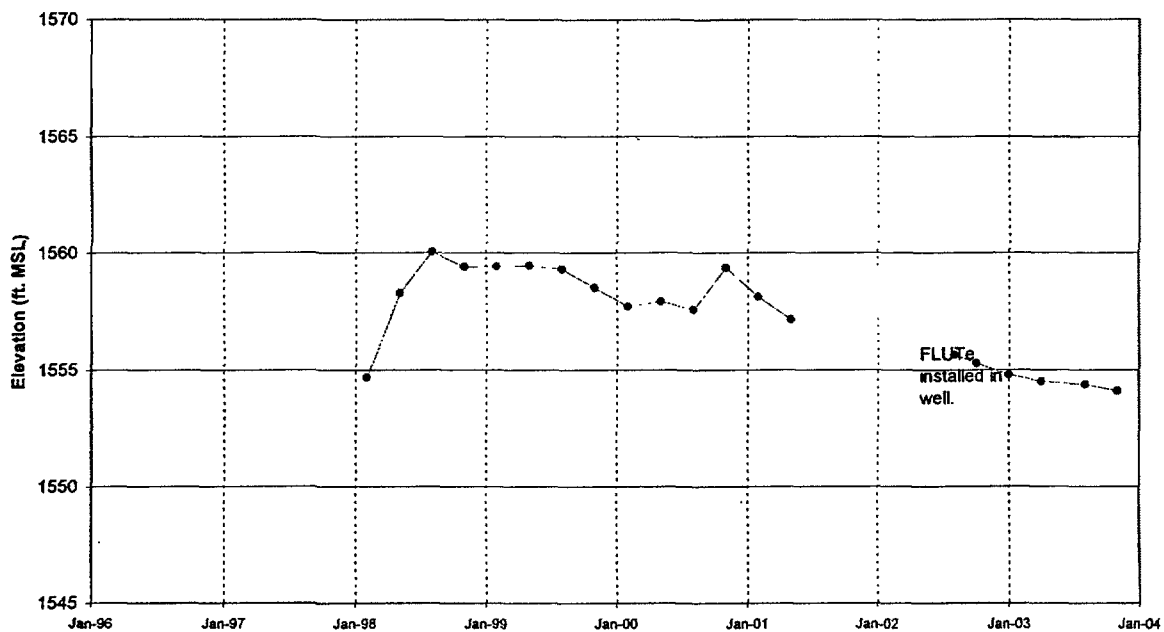
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-68B
Figure A-196



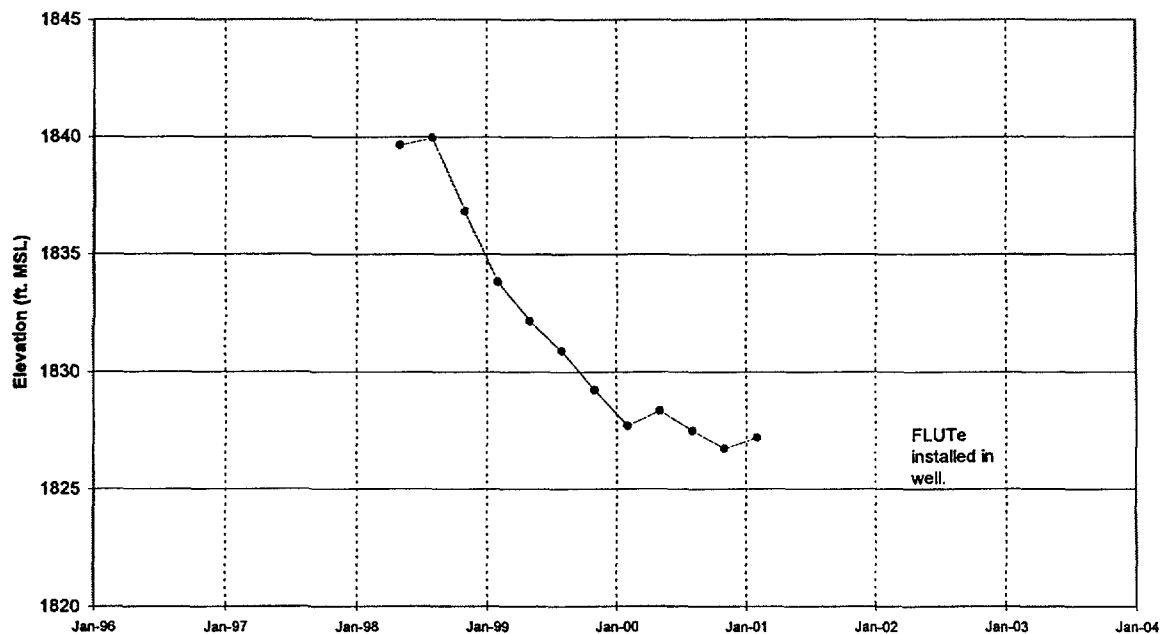
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-69
Figure A-197



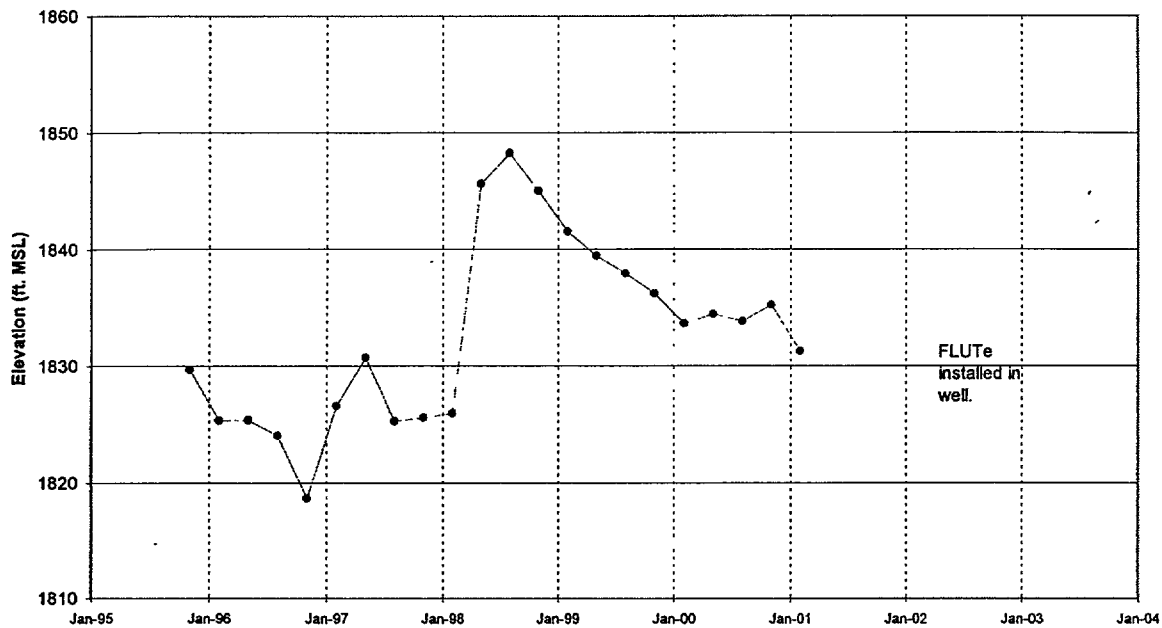
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-70
Figure A-198



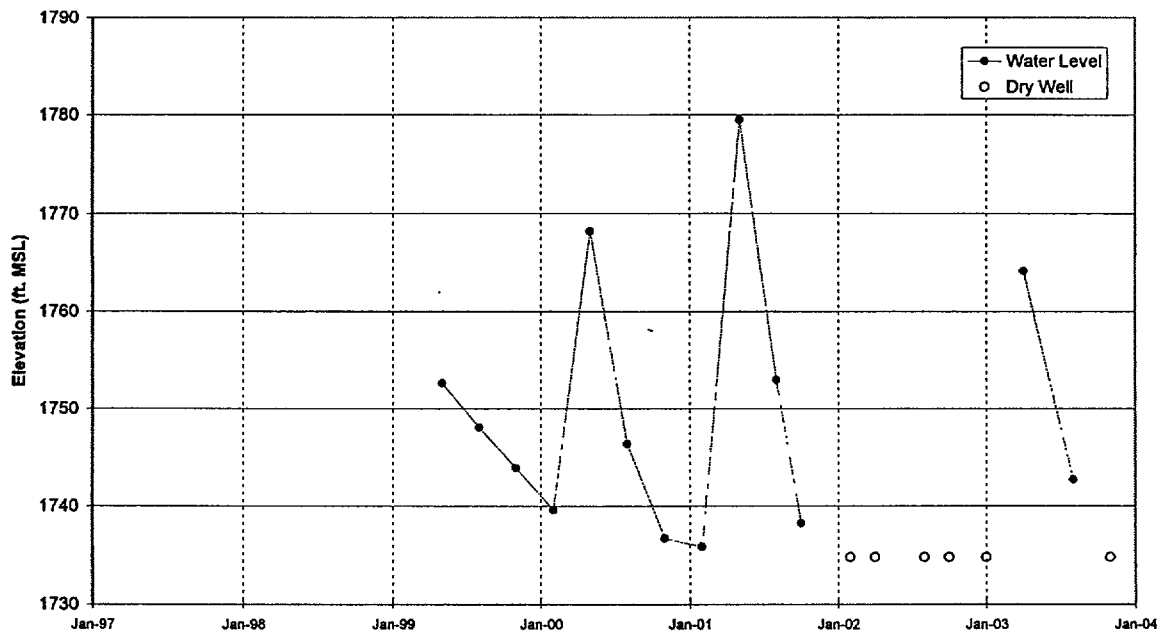
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-71
Figure A-199



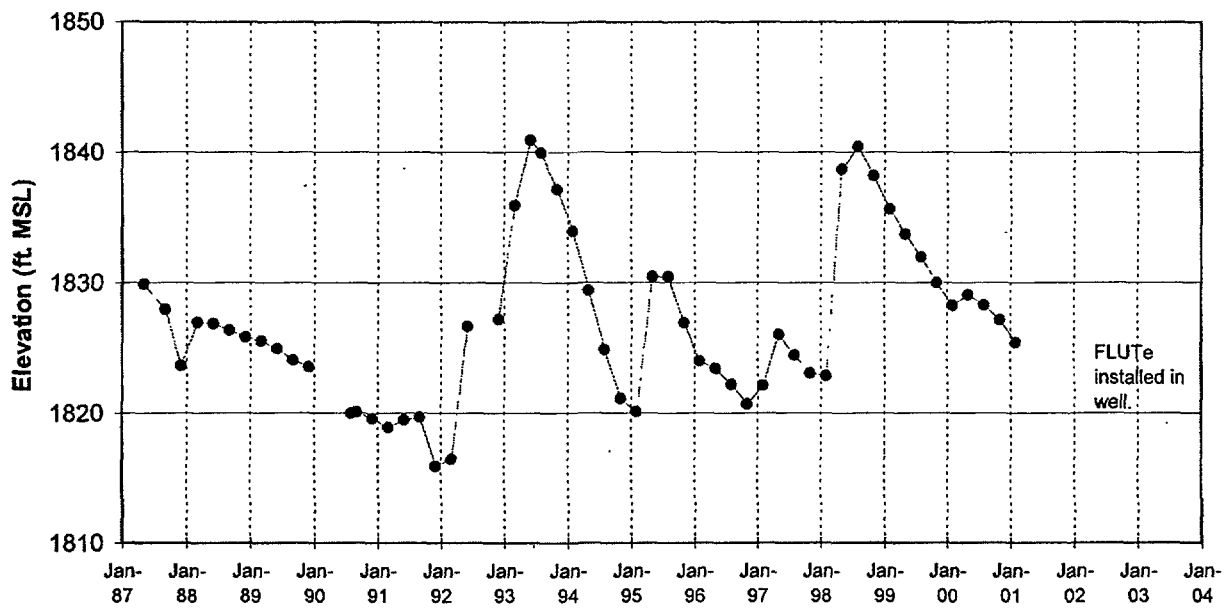
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-72
Figure A-200



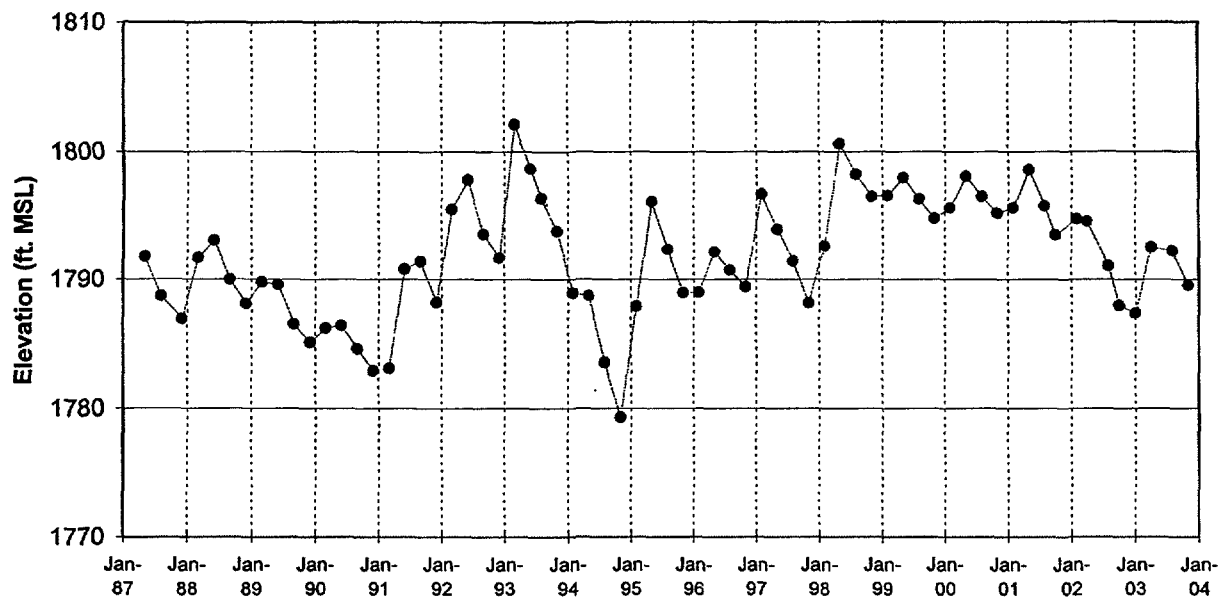
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-73
Figure A-201



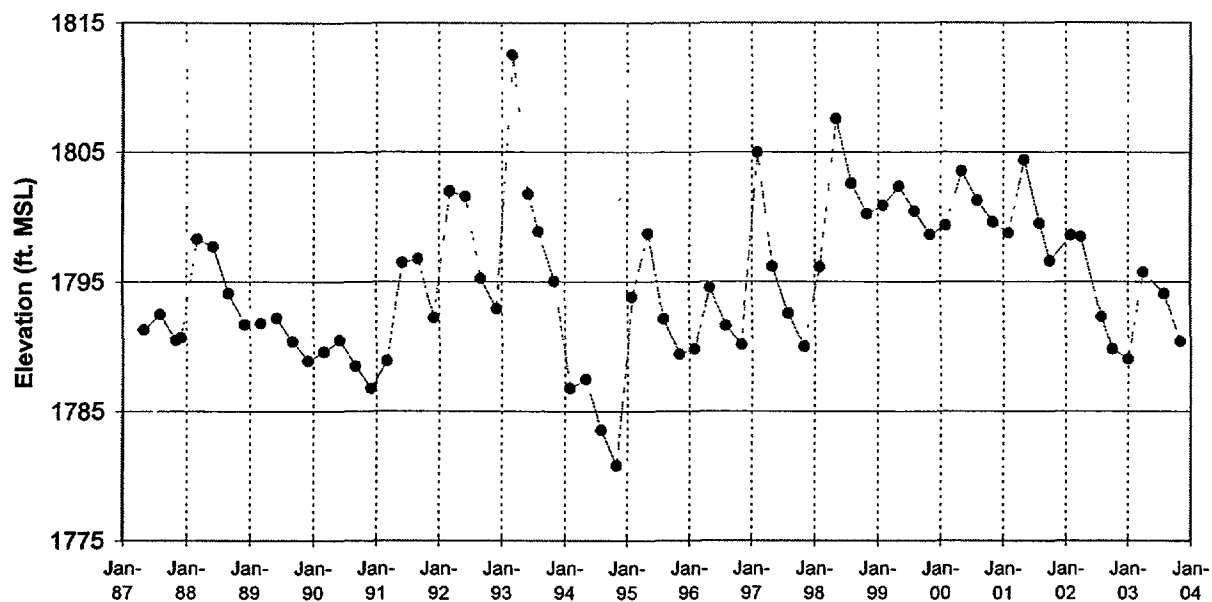
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well RD-74
Figure A-202



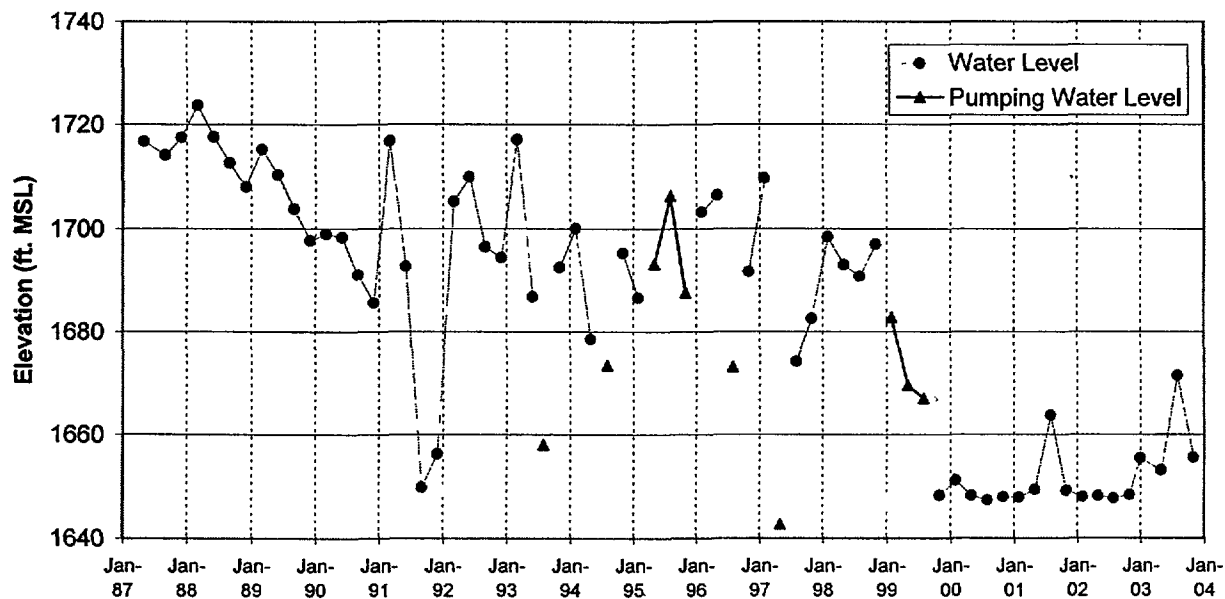
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-1
Figure A-203



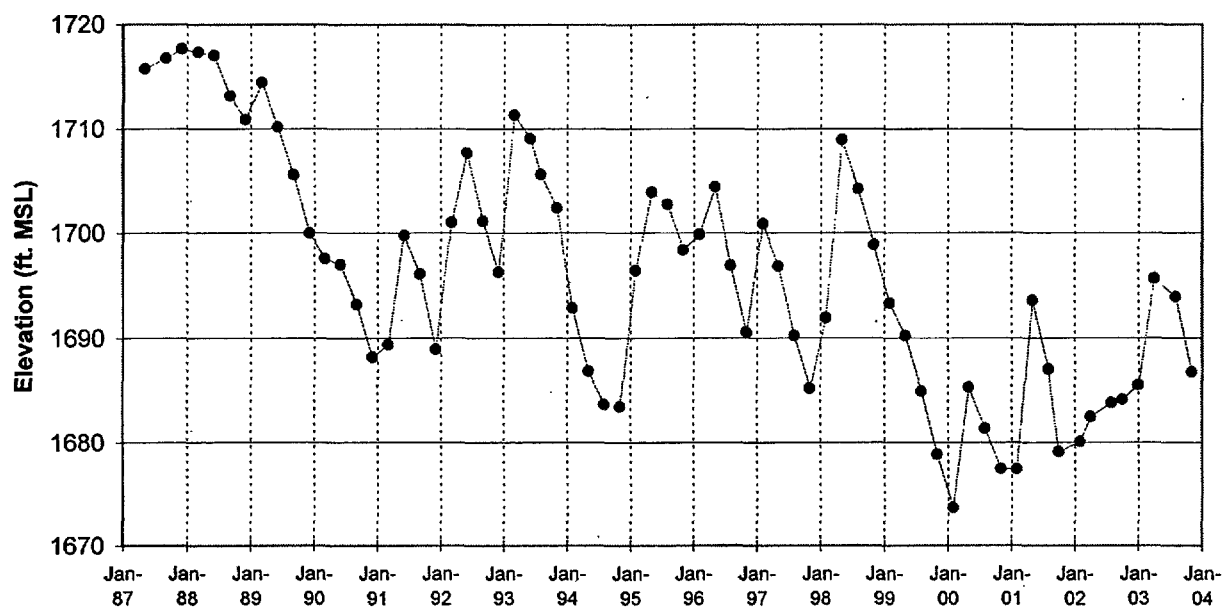
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-5
Figure A-204



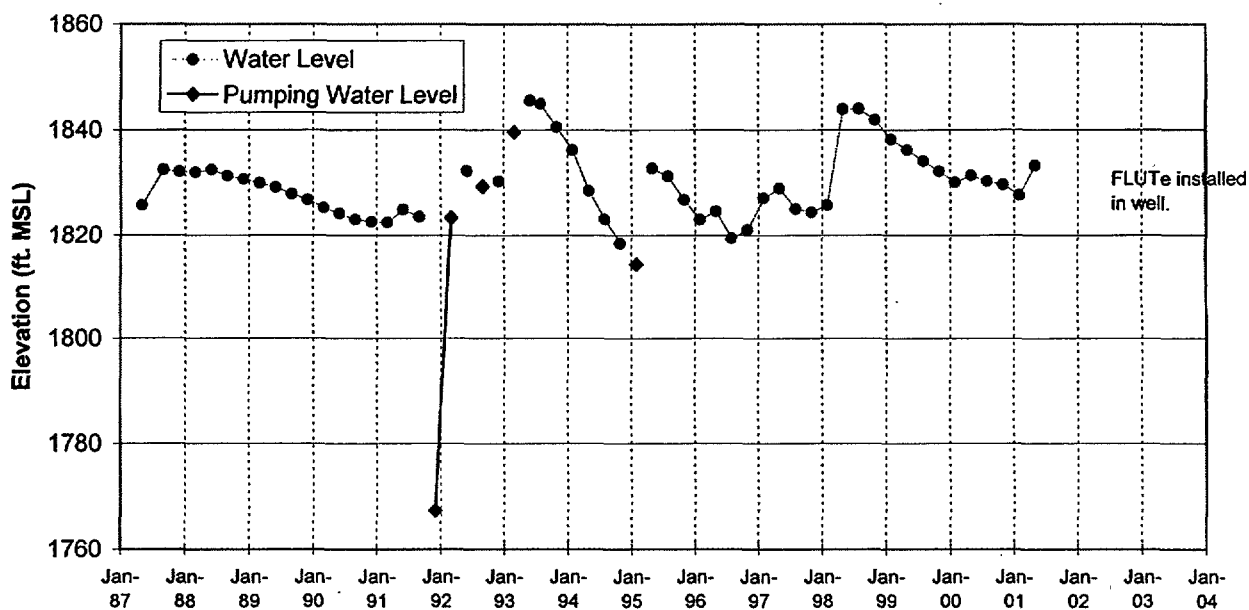
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-6
Figure A-205



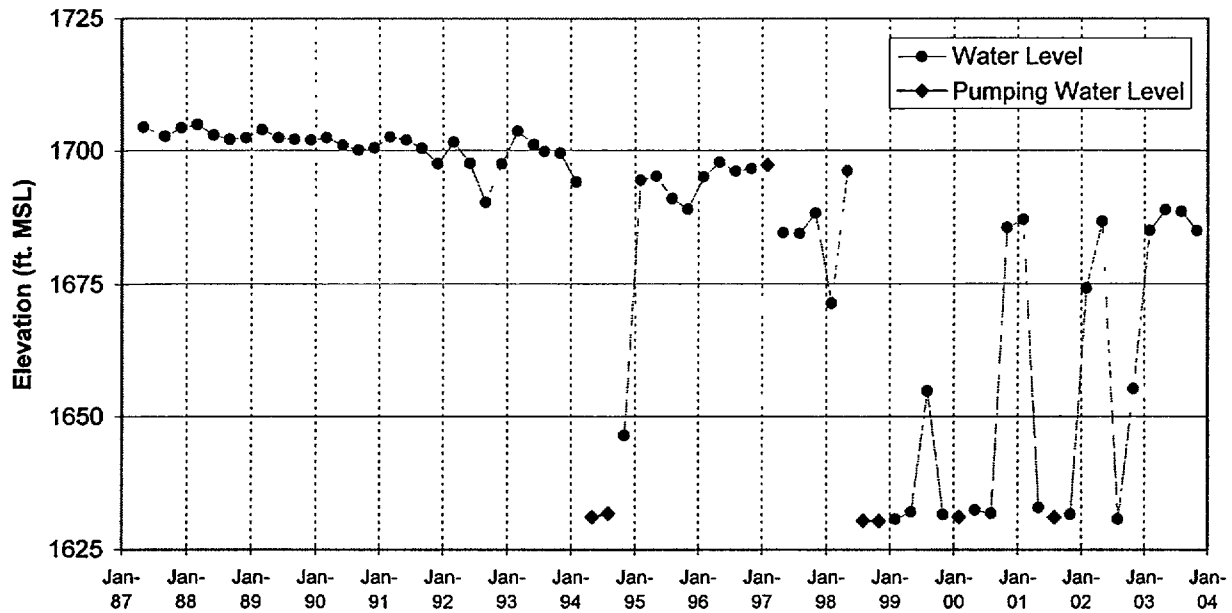
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-7
Figure A-206



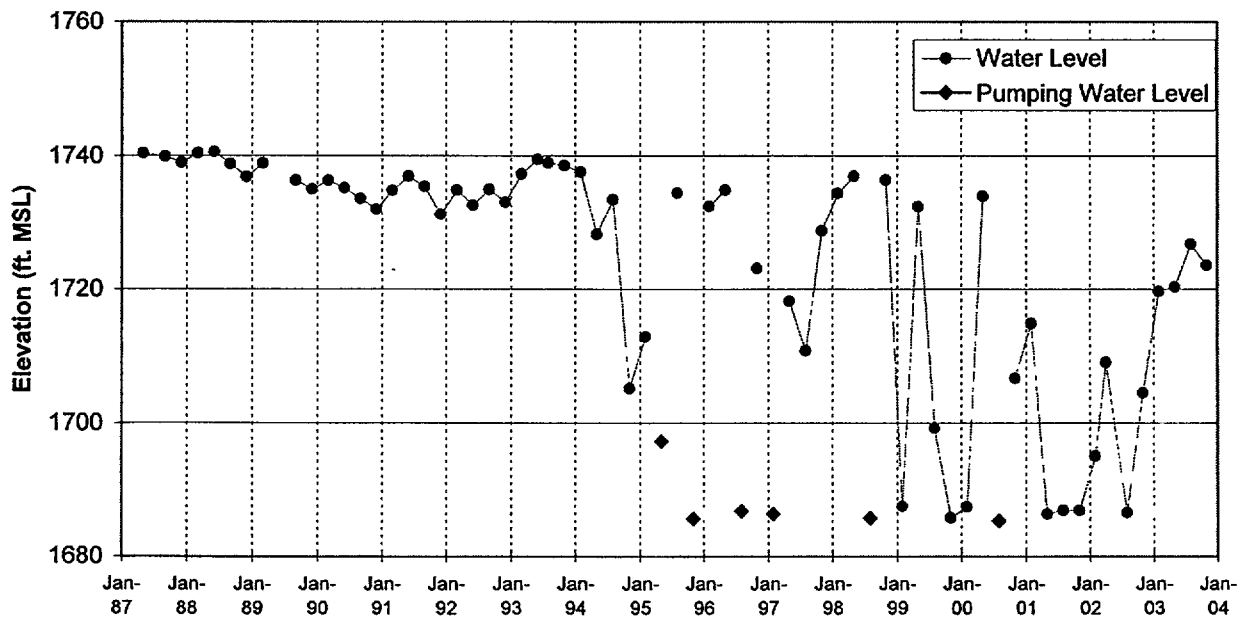
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-8
Figure A-207



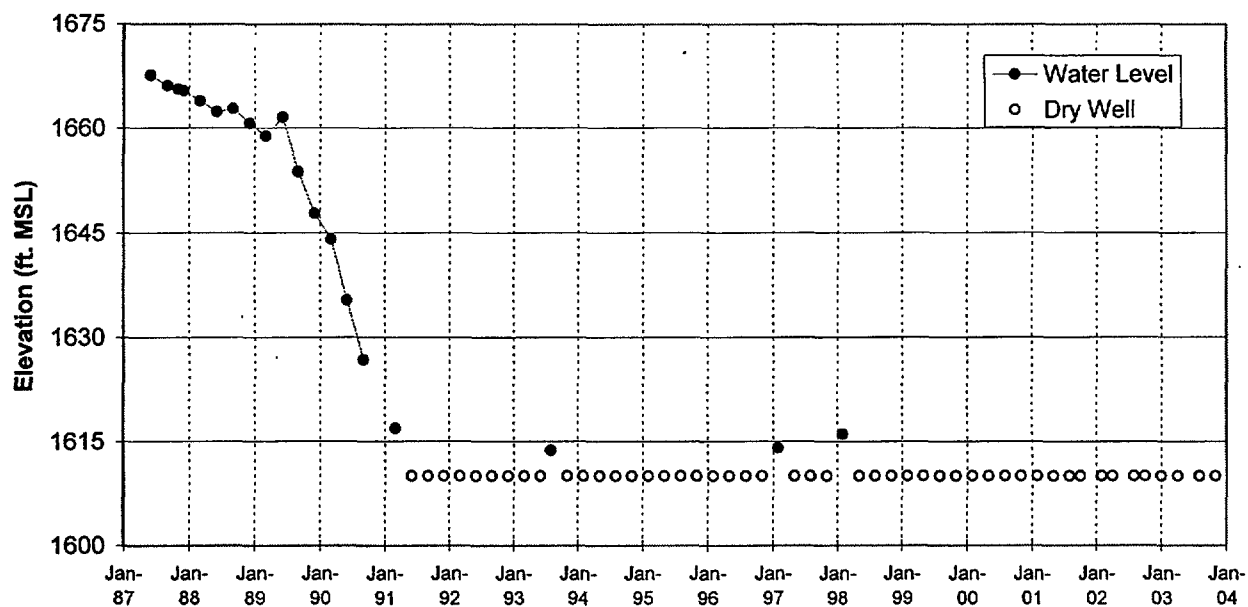
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-16
Figure A-208



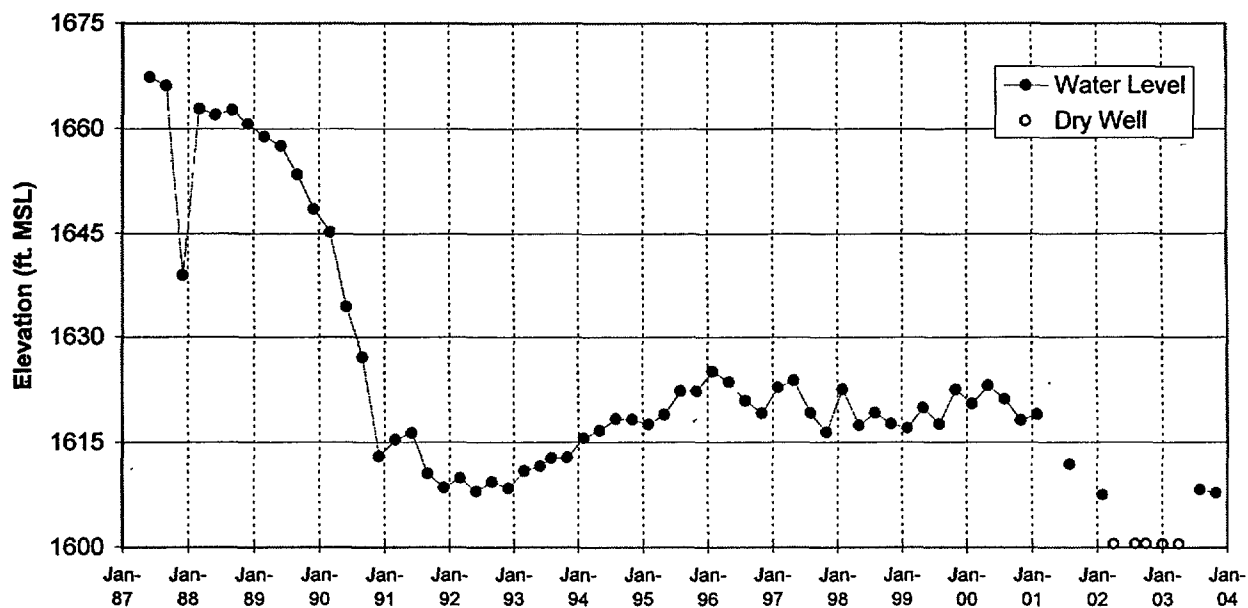
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-17
Figure A-209



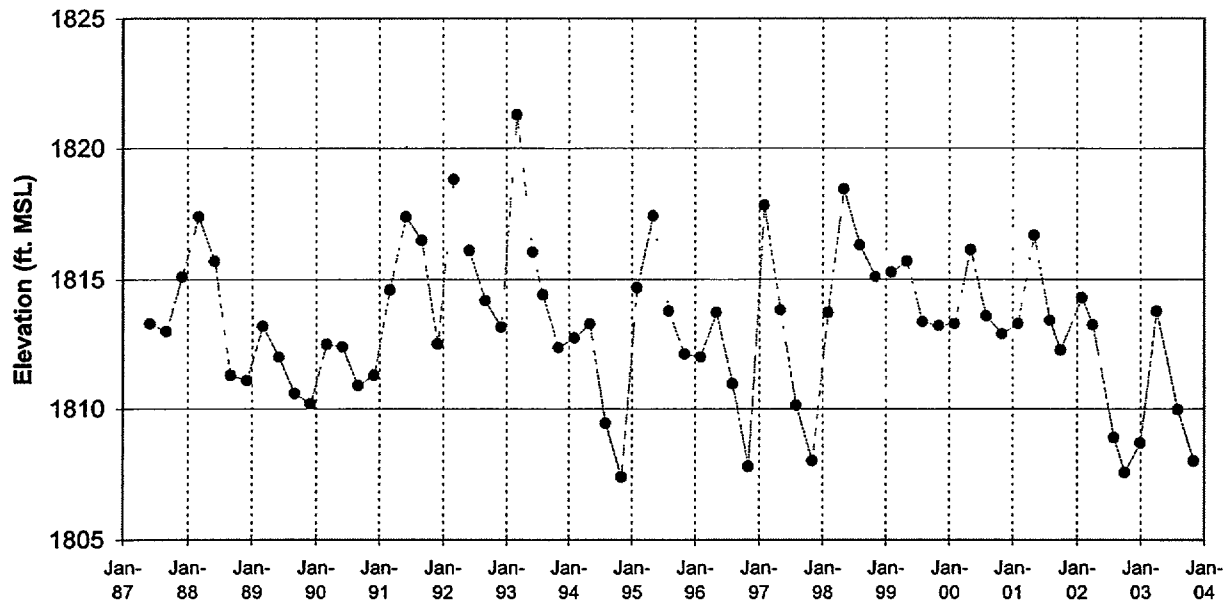
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-18
Figure A-210



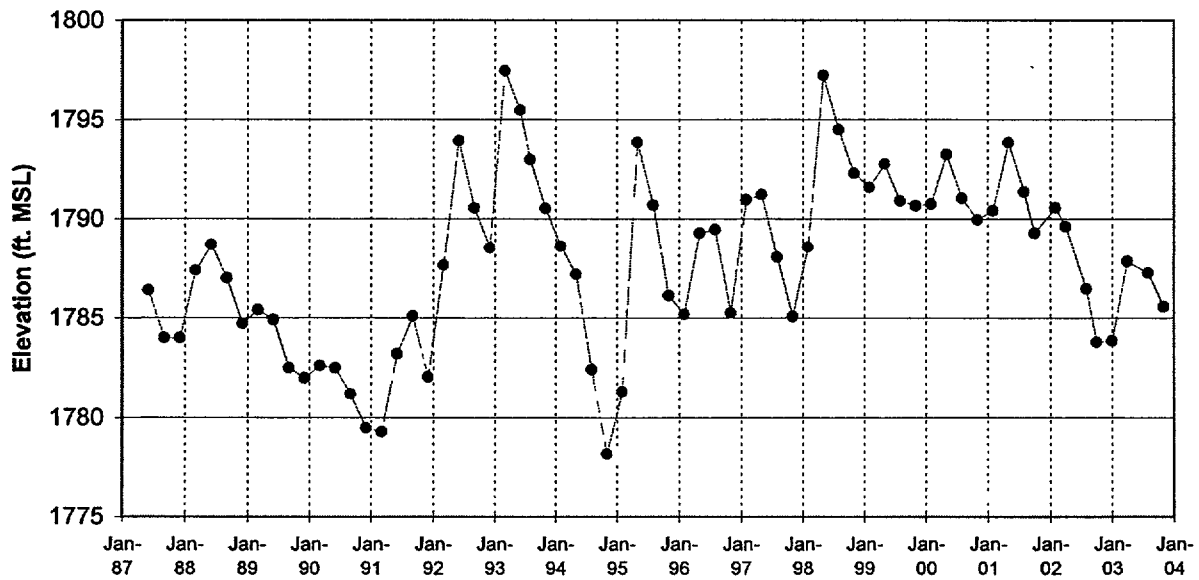
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-19
Figure A-211



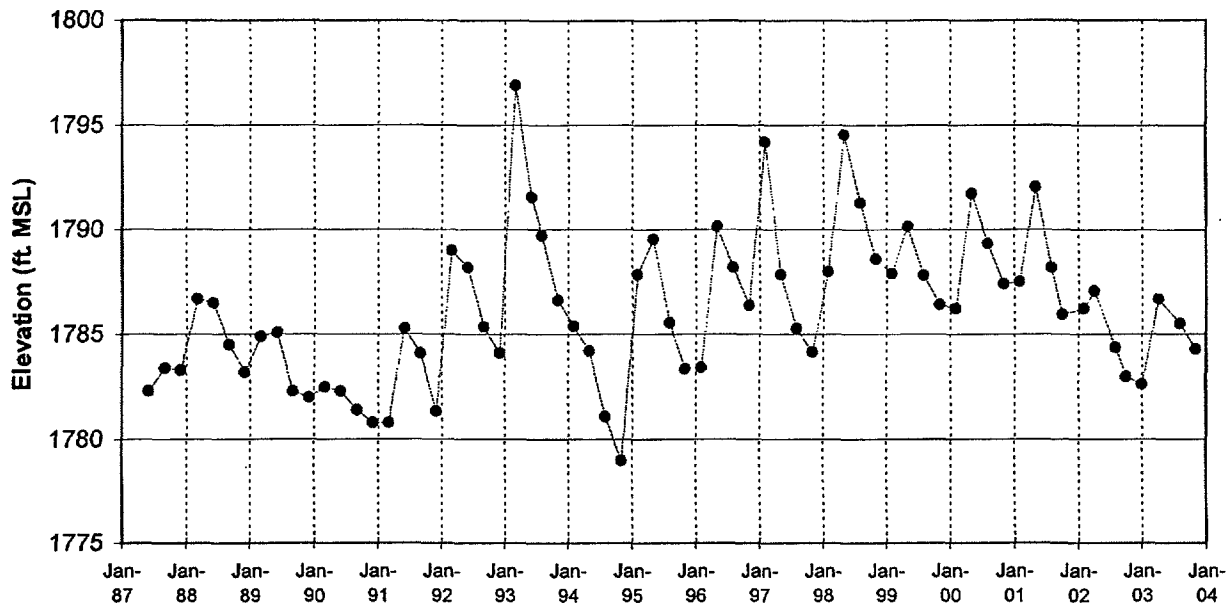
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-20
Figure A-212



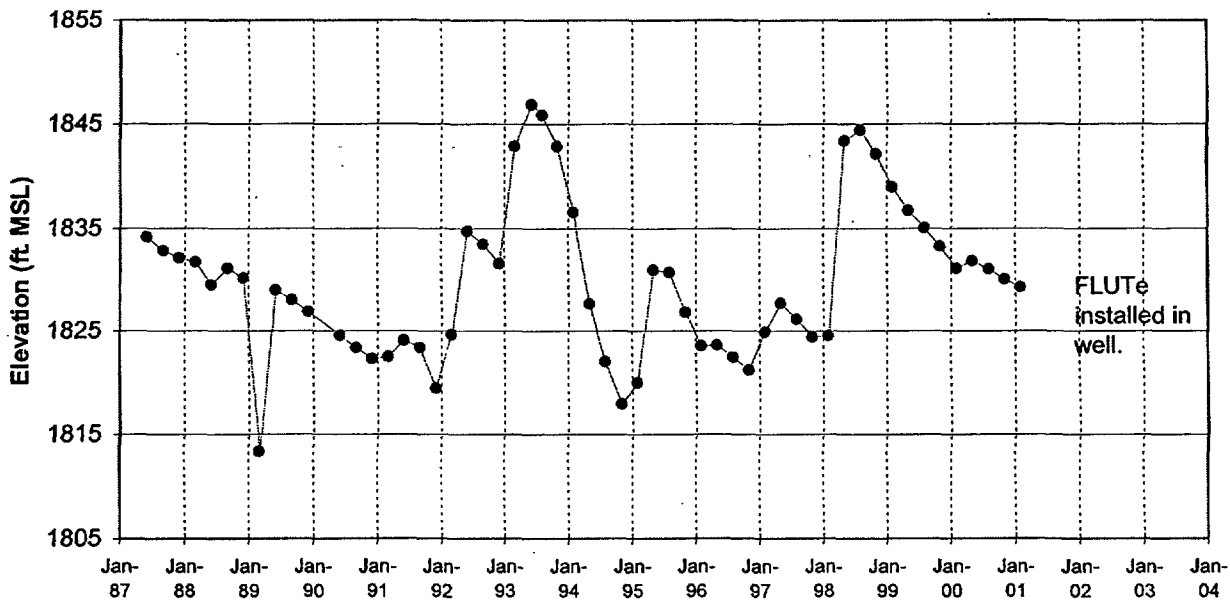
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-21
Figure A-213



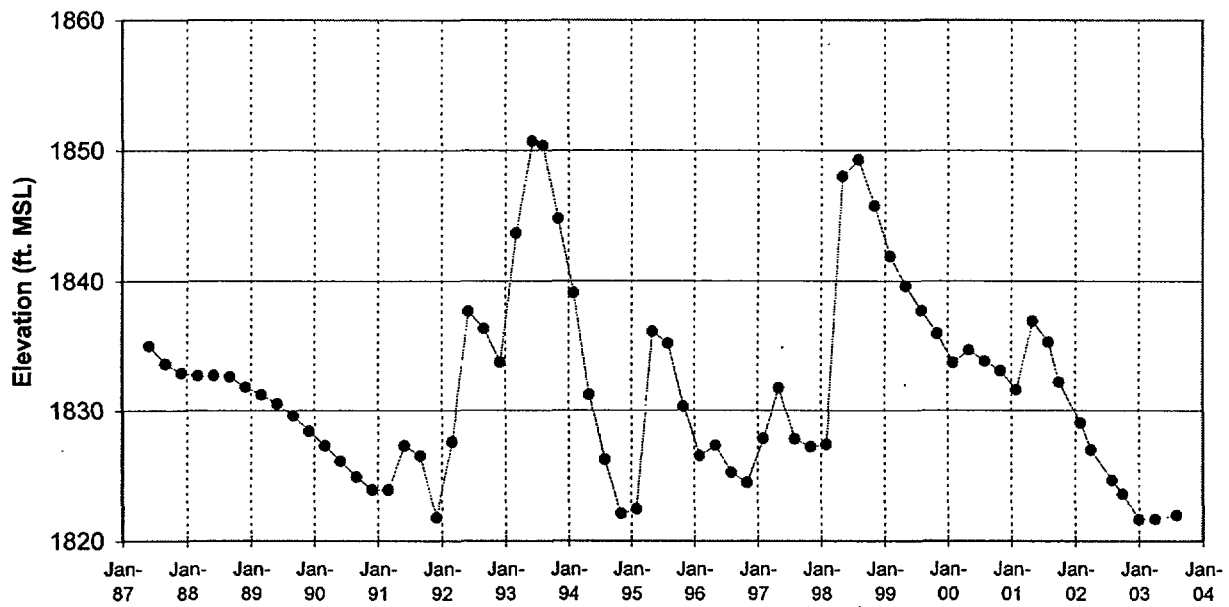
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-22
Figure A-214



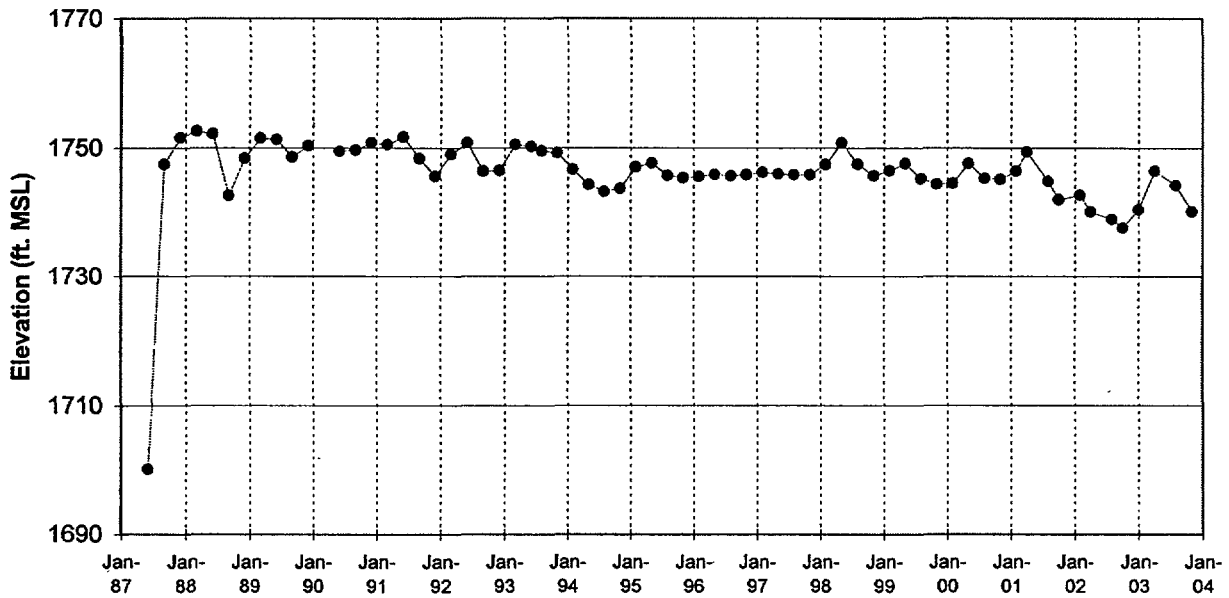
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-23
Figure A-215



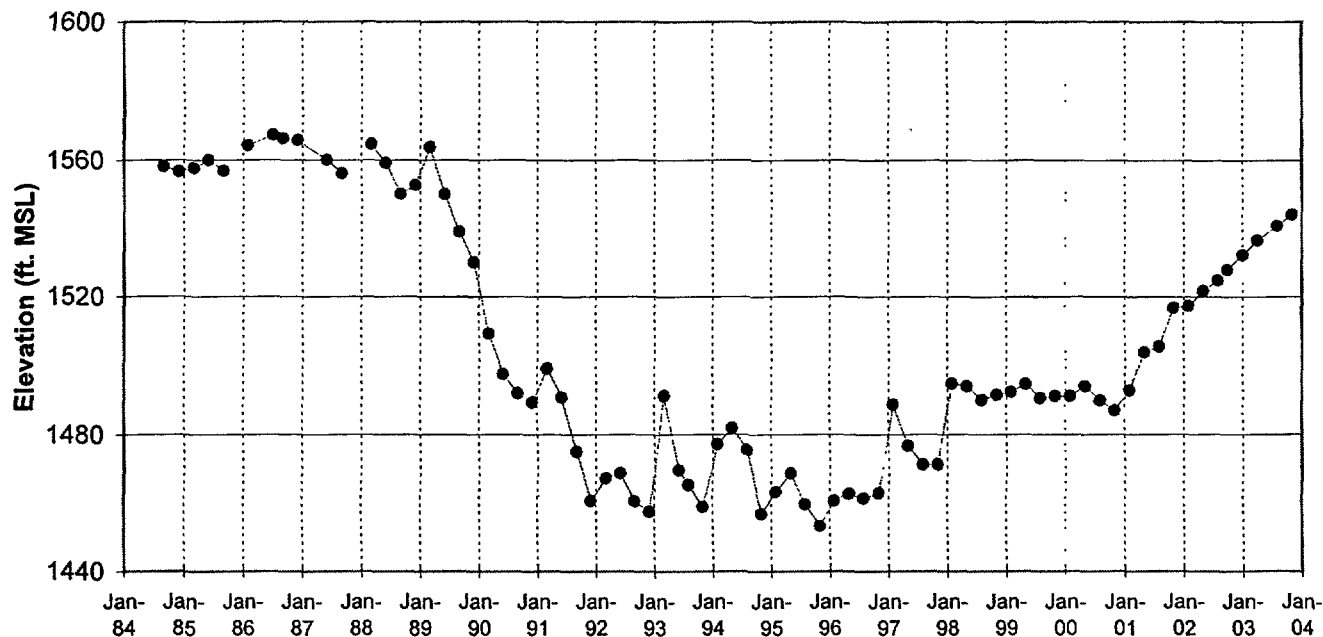
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-24
Figure A-216



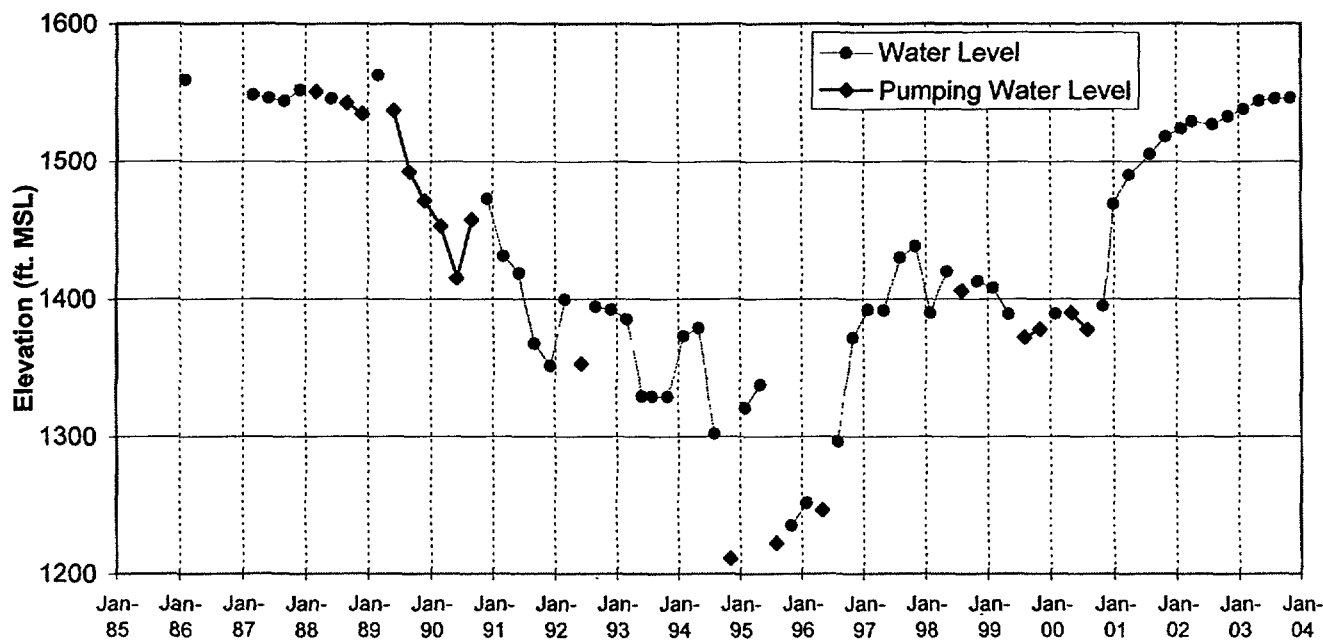
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-25
Figure A-217



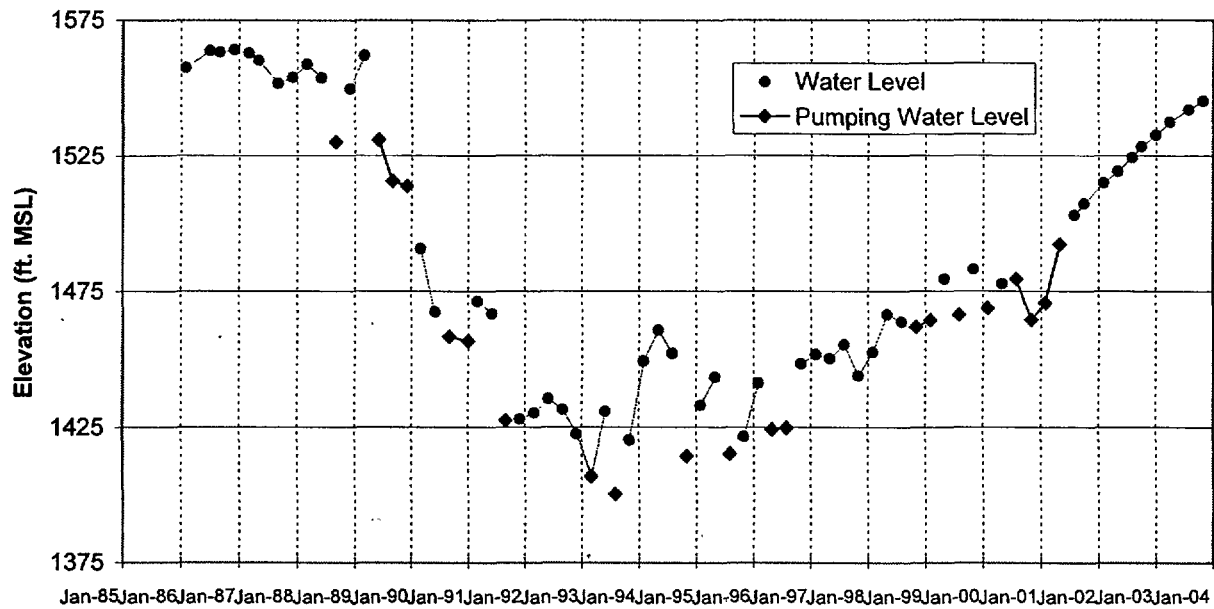
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well HAR-26
Figure A-218



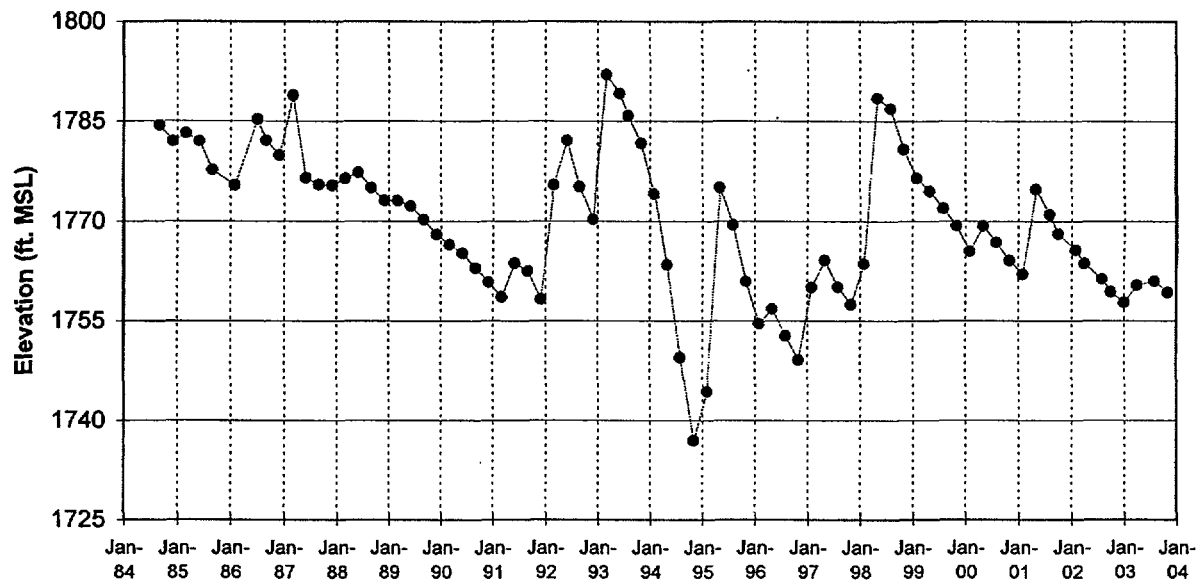
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-4A
Figure A-219



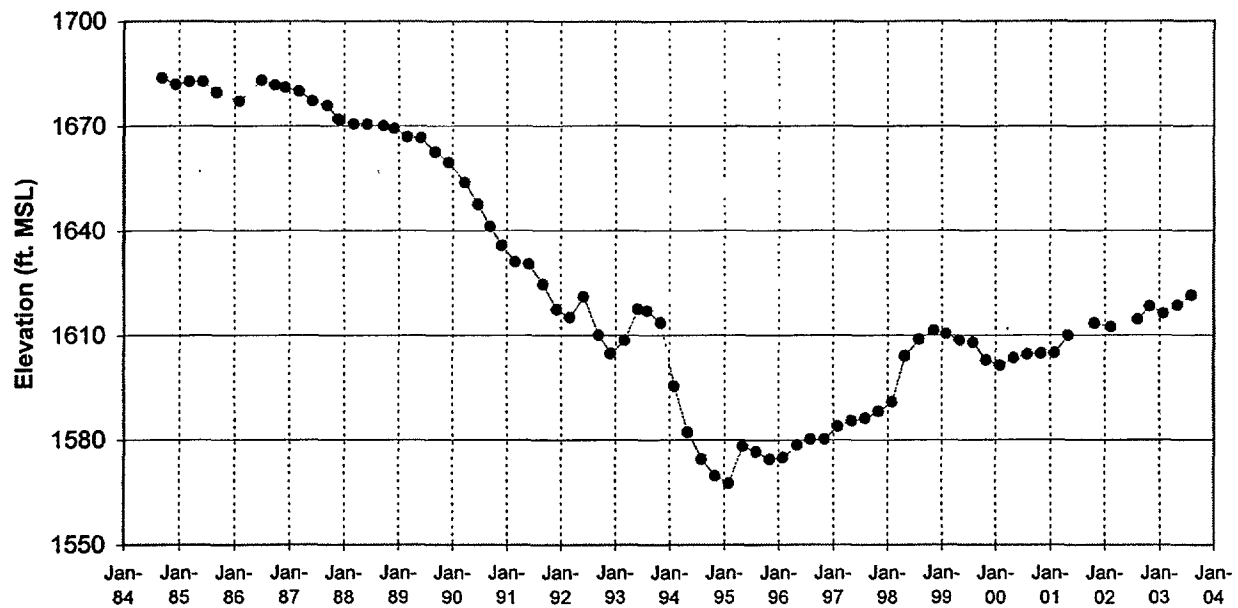
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-5
Figure A-220



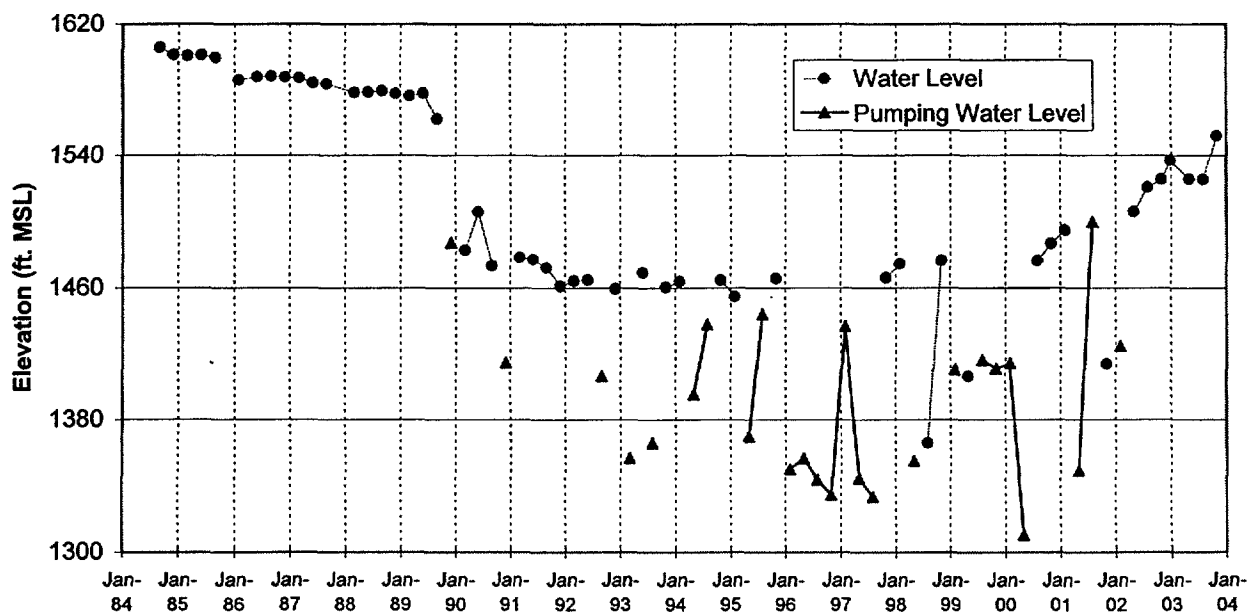
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-6
Figure A-221



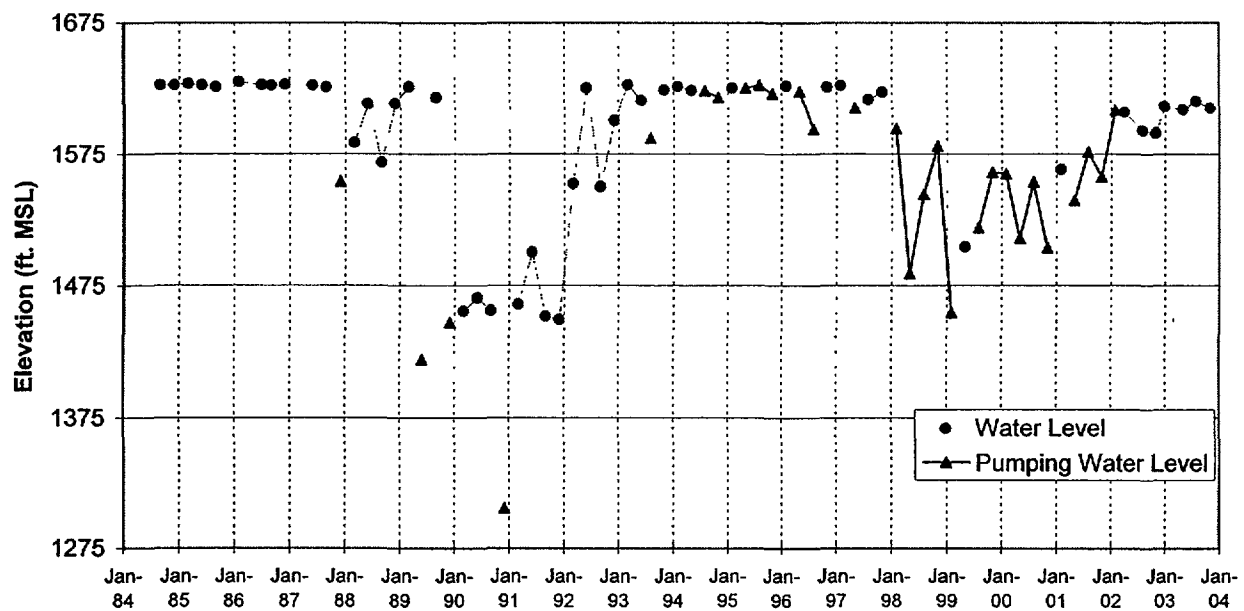
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-7
Figure A-222



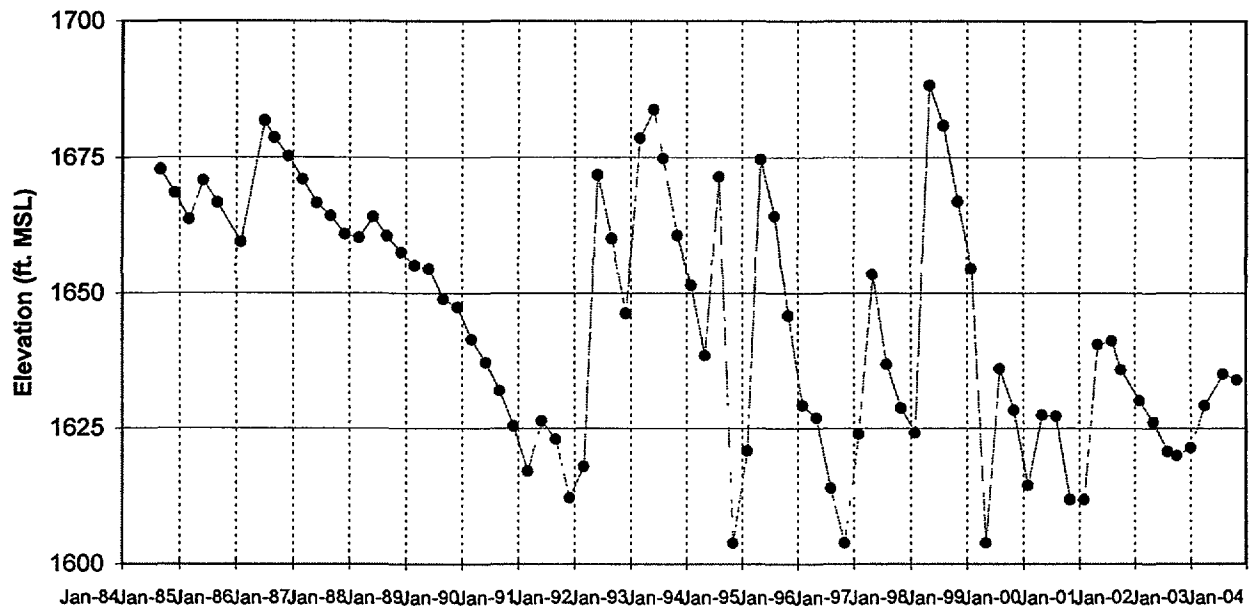
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-8
Figure A-223



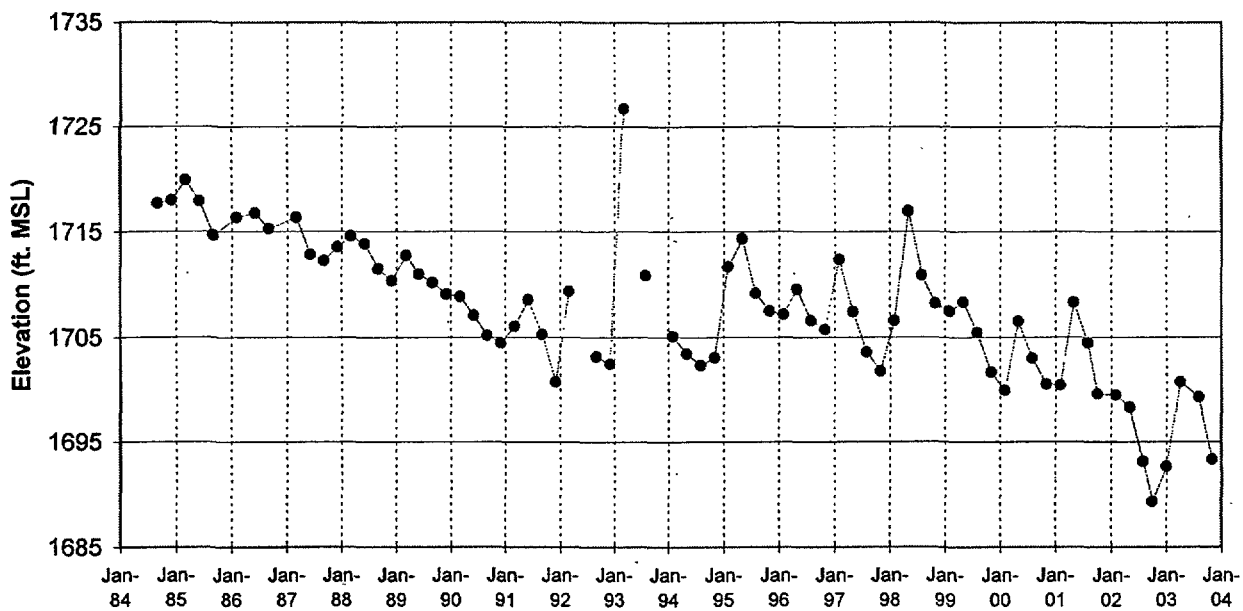
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-9
Figure A-224



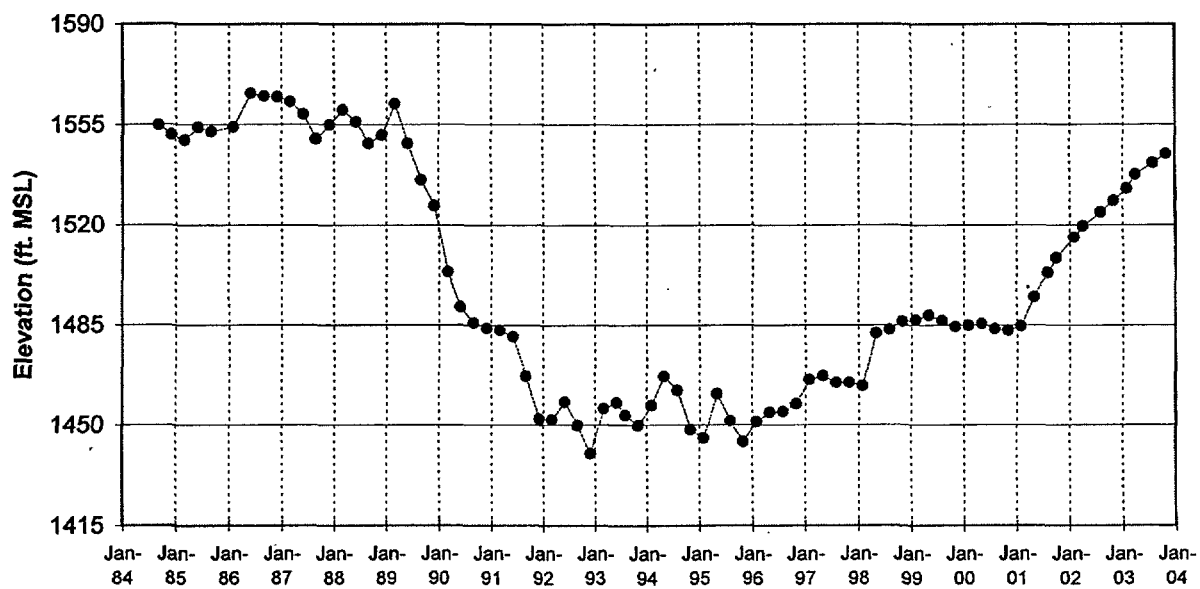
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-9A
Figure A-225



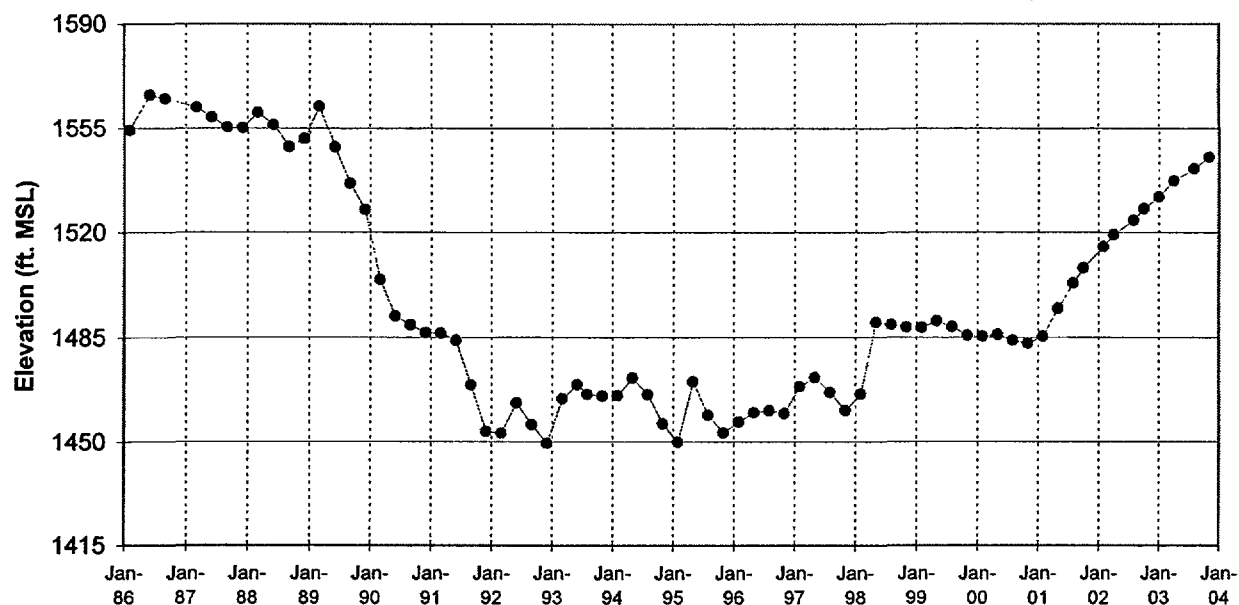
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-9B
Figure A-226



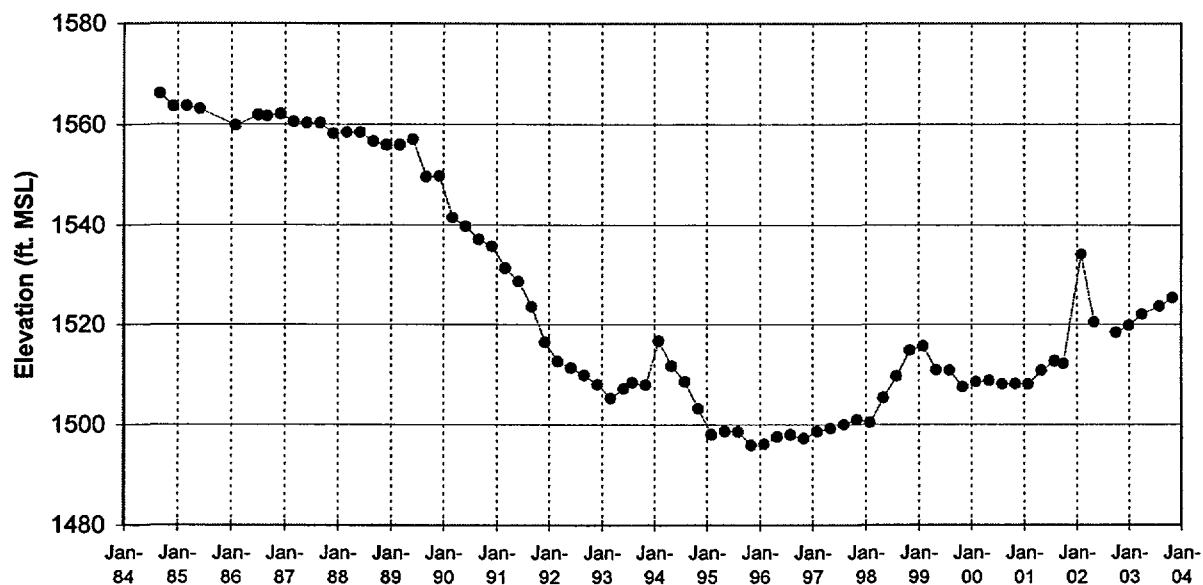
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-11
Figure A-227



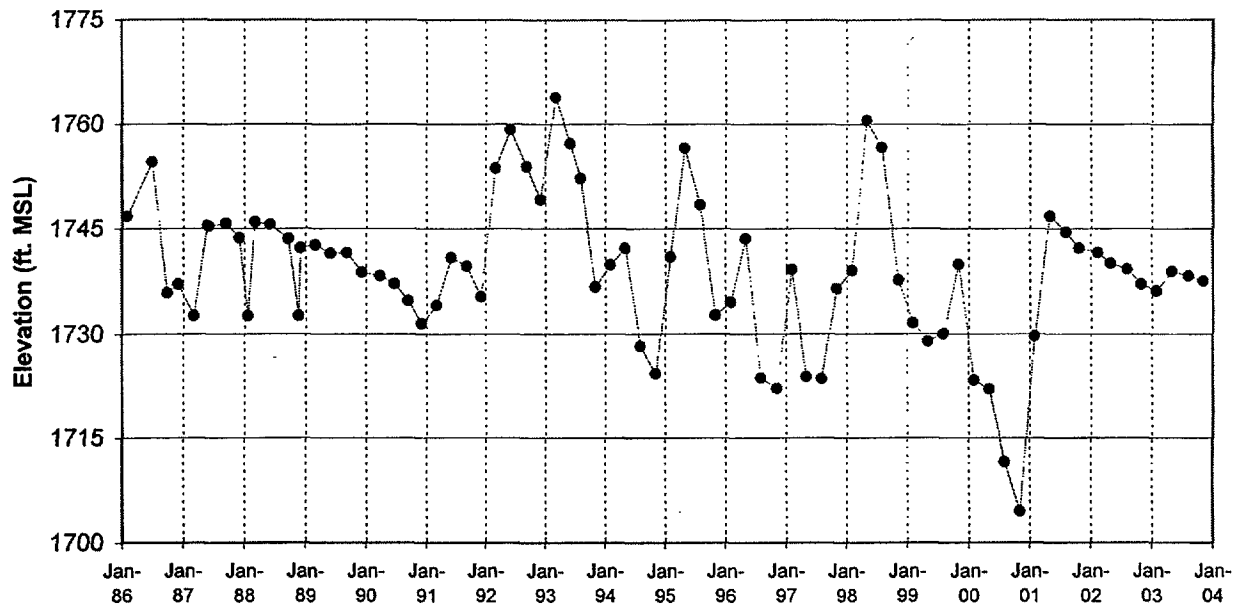
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-12
Figure A-228



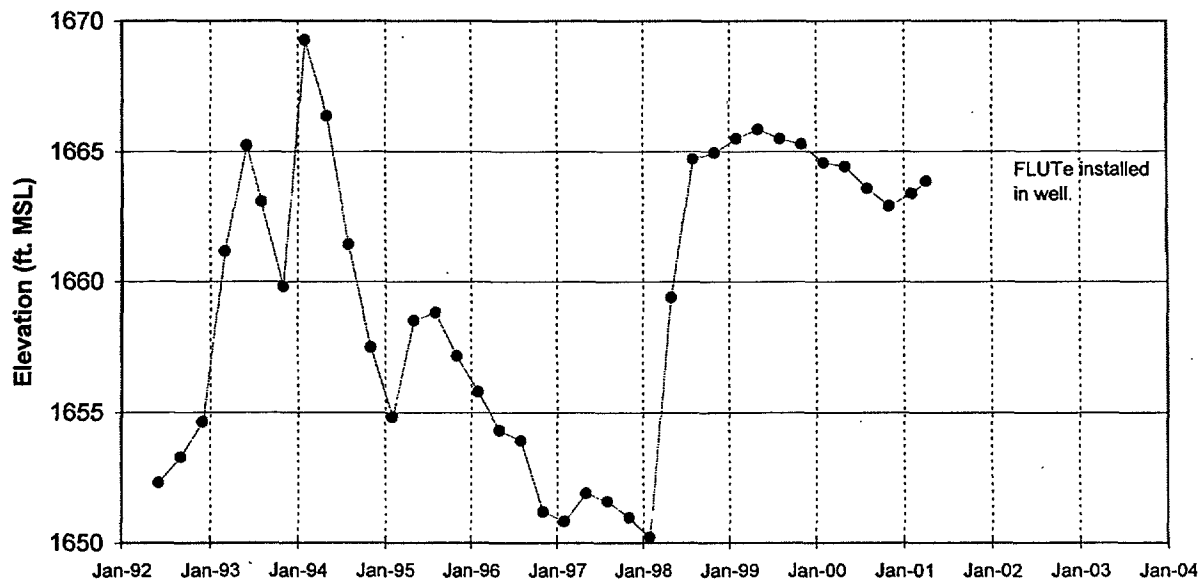
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-13
Figure A-229



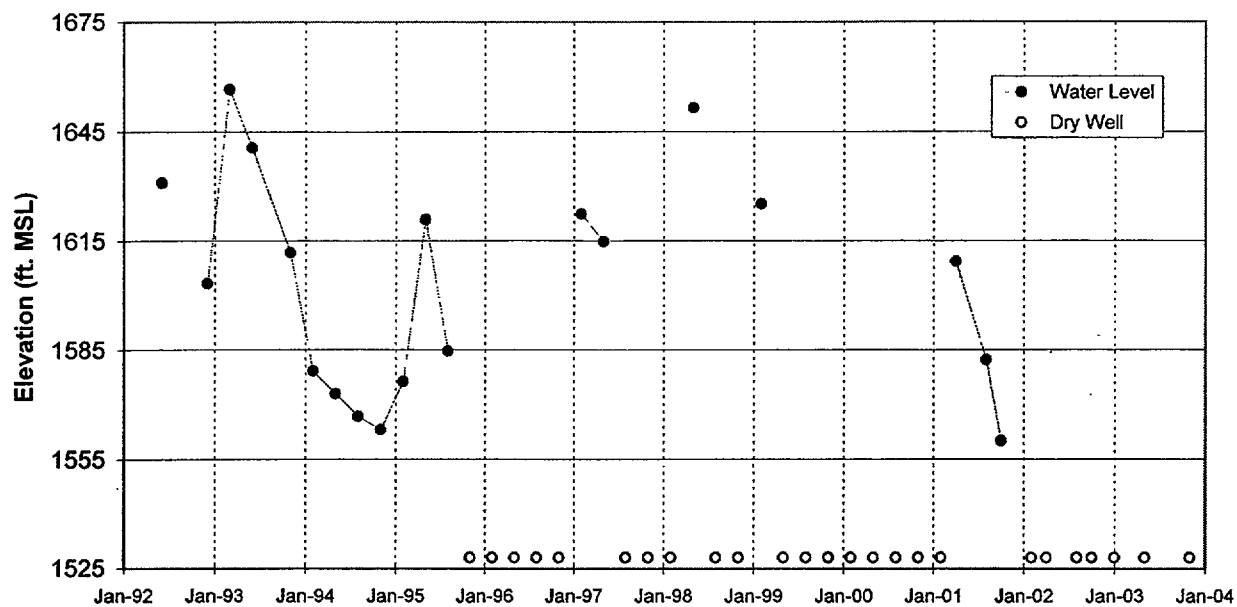
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-14
Figure A-230



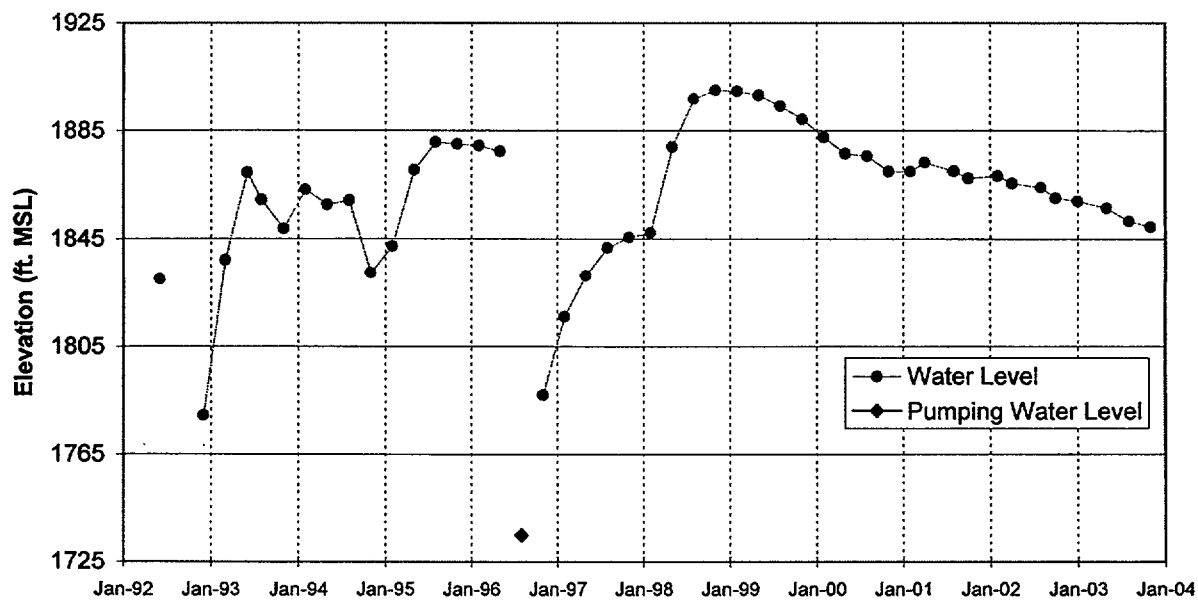
WATER LEVEL HYDROGRAPH
Chatsworth Formation Well WS-SP
Figure A-231



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well OS-24
Figure A-232



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well OS-25
Figure A-233



WATER LEVEL HYDROGRAPH
Chatsworth Formation Well OS-26
Figure A-234

Figure A-235
Chatsworth Formation Well RD-10 FLUTE Transducer Measurements

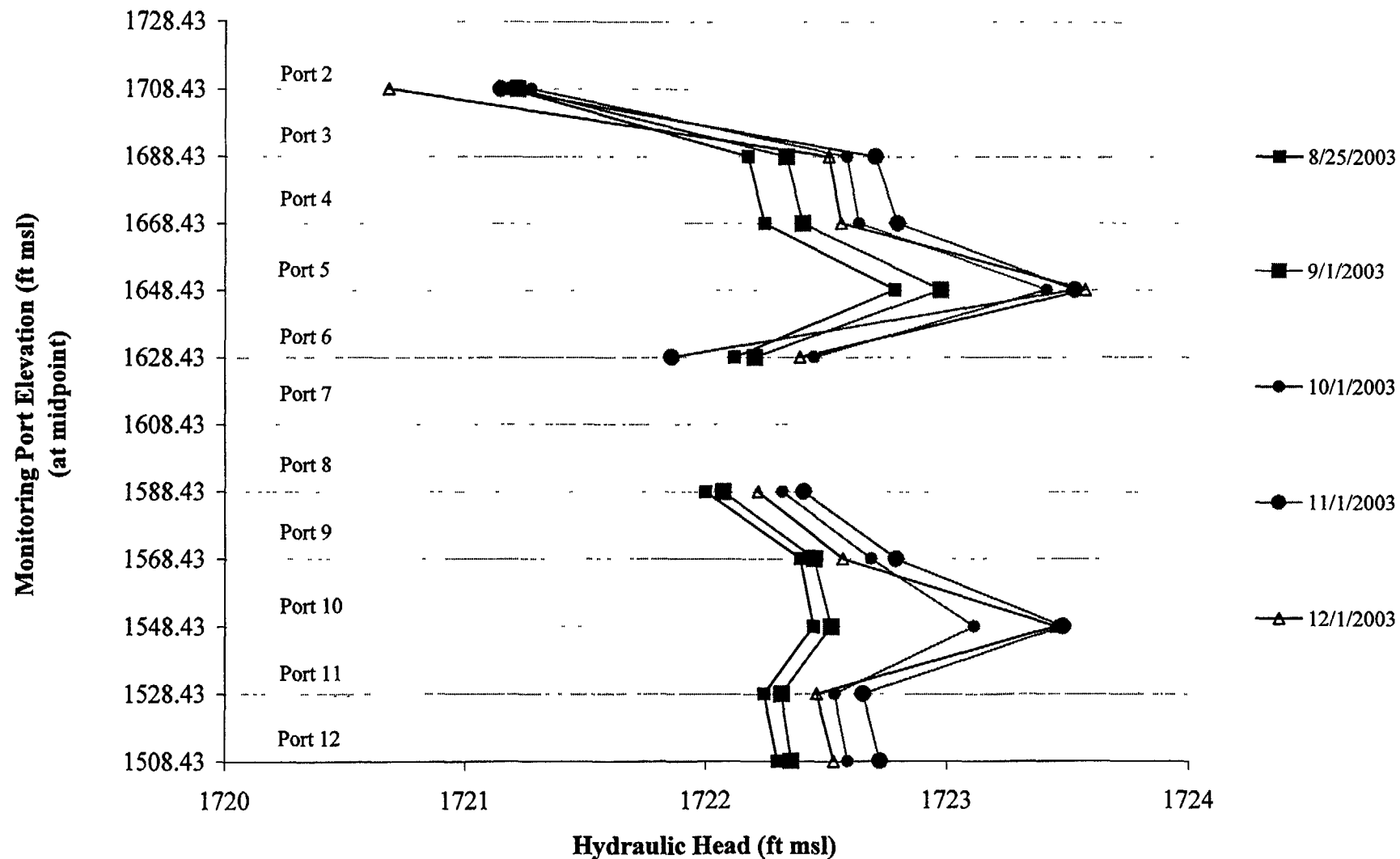


Figure A-236
Chatsworth Formation Well RD-21 FLUTe Transducer Measurements

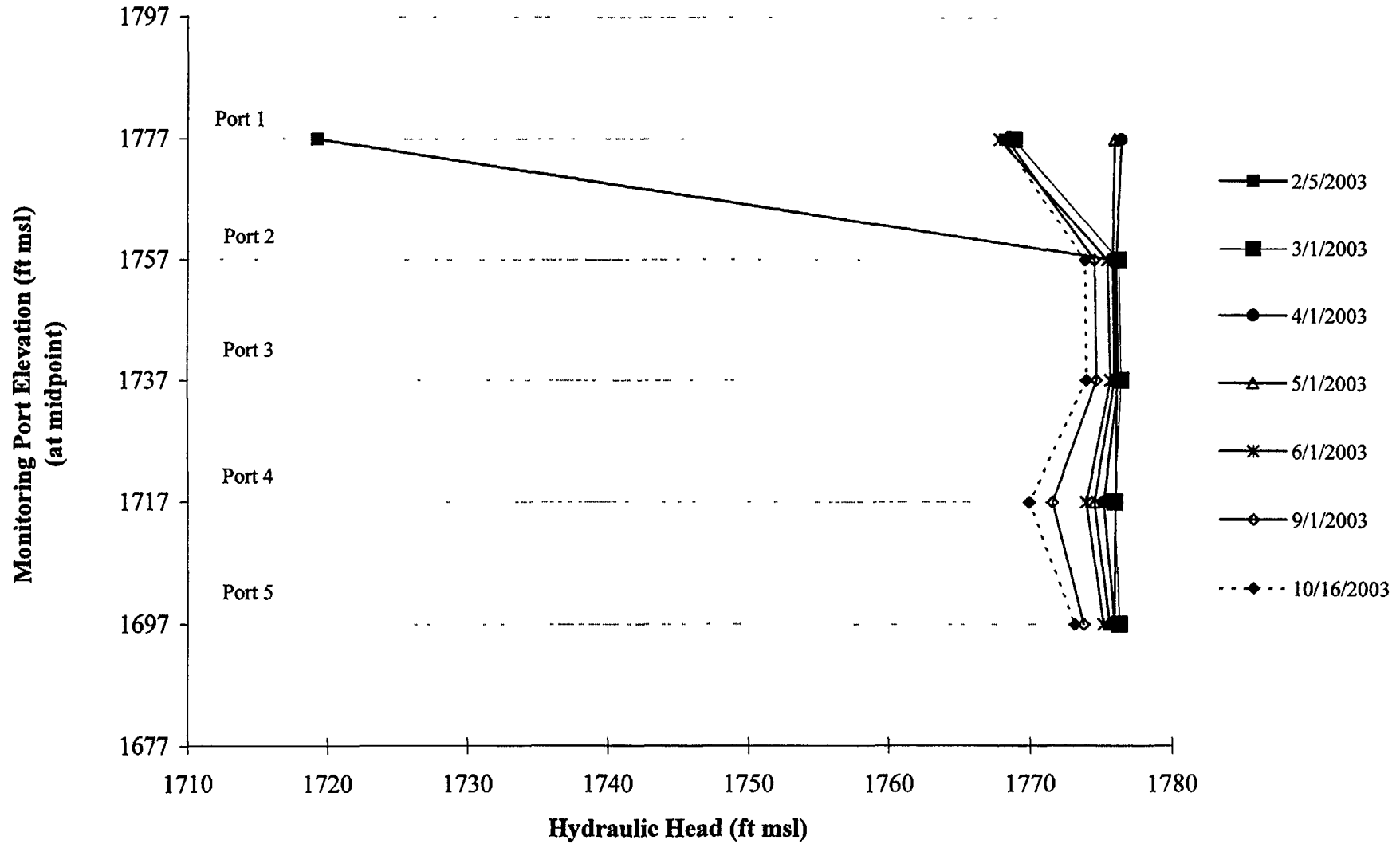


Figure A-237
Chatsworth Formation Well RD-22 FLUTe Transducer Measurements

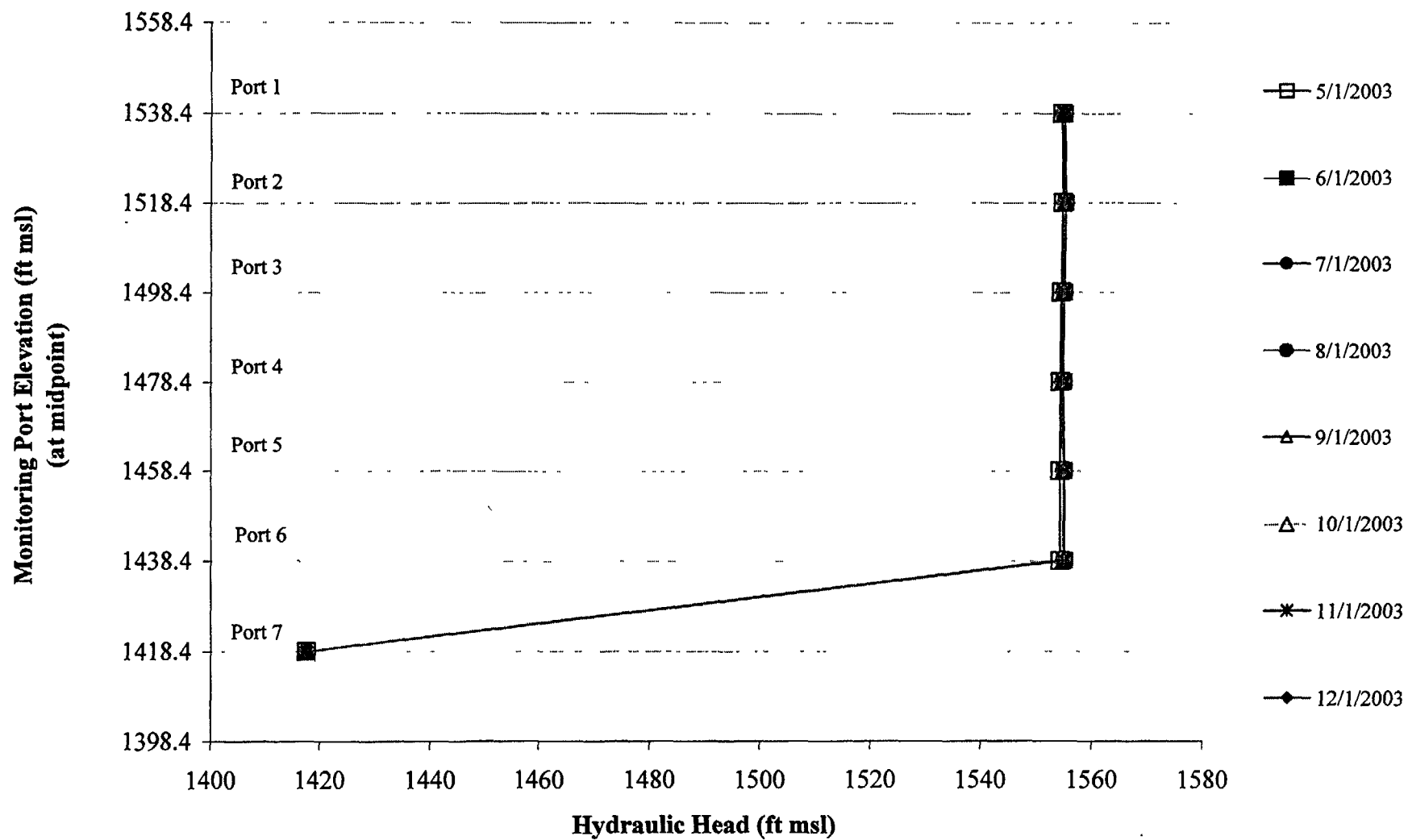


Figure A-238
Chatsworth Formation Well RD-23 FLUTE Transducer Measurements

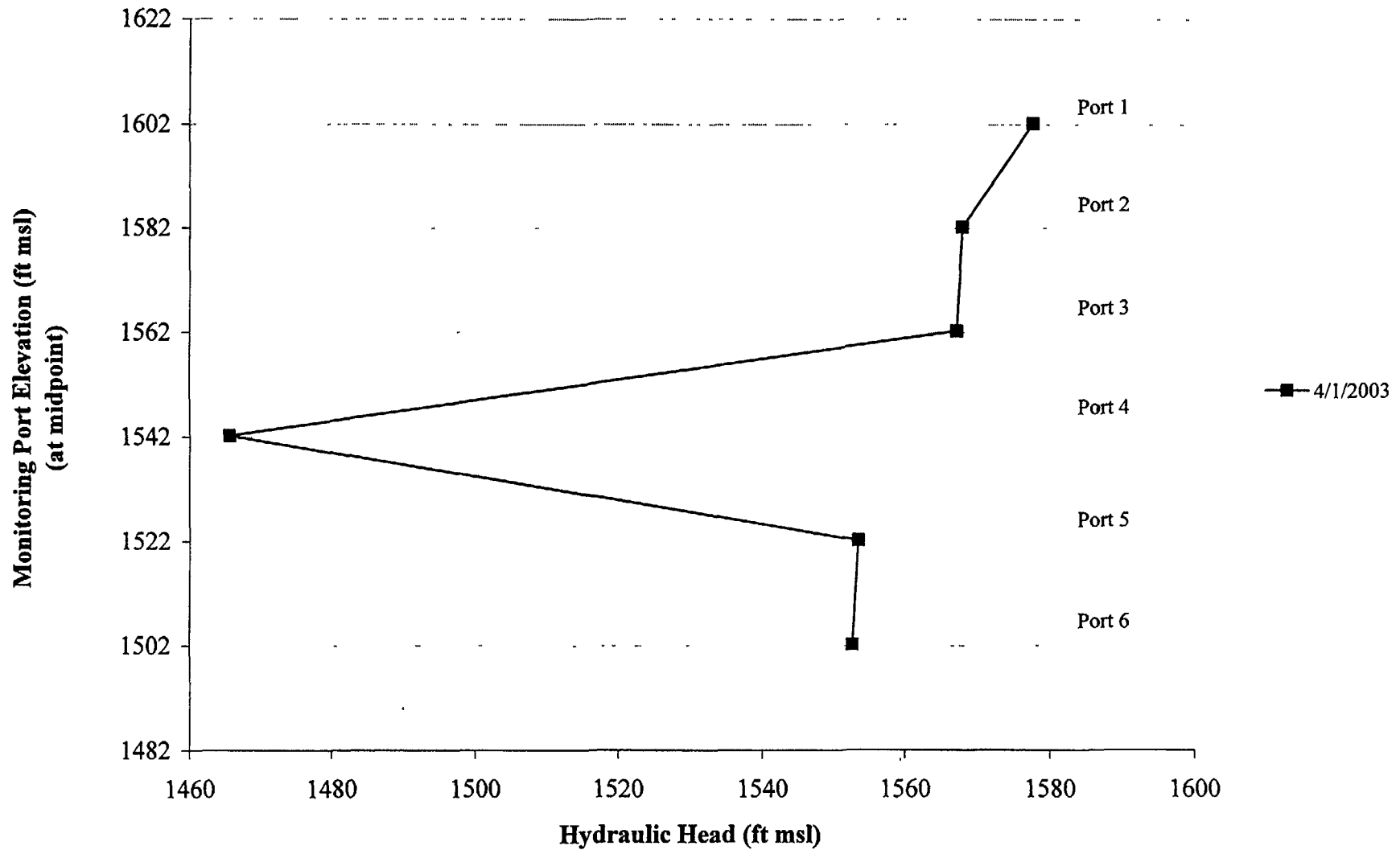


Figure A-239
Chatsworth Formation Well RD-31 FLUTe Transducer Measurements

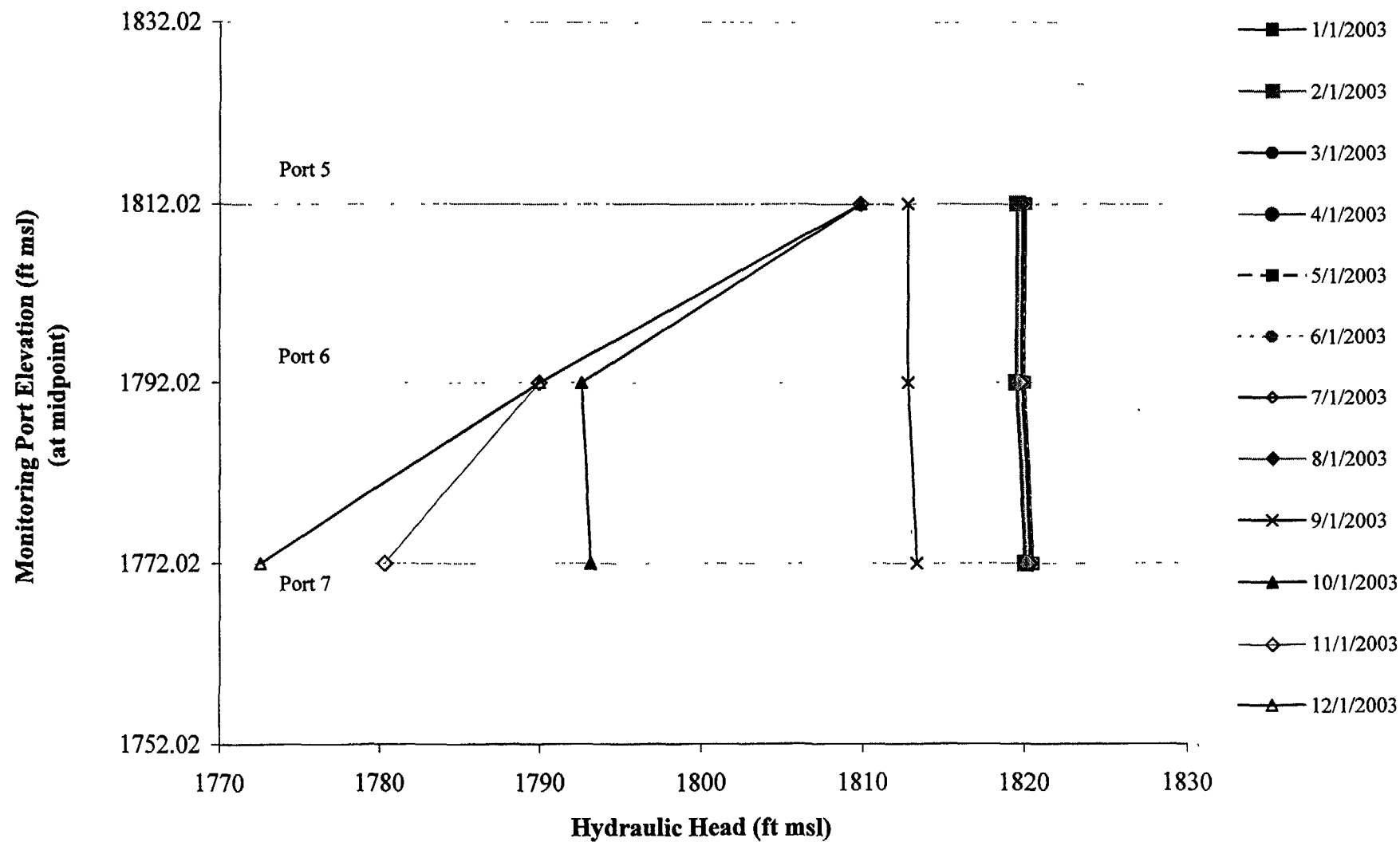


Figure A-240
Chatsworth Formation Well RD-33A FLUTE Transducer Measurements

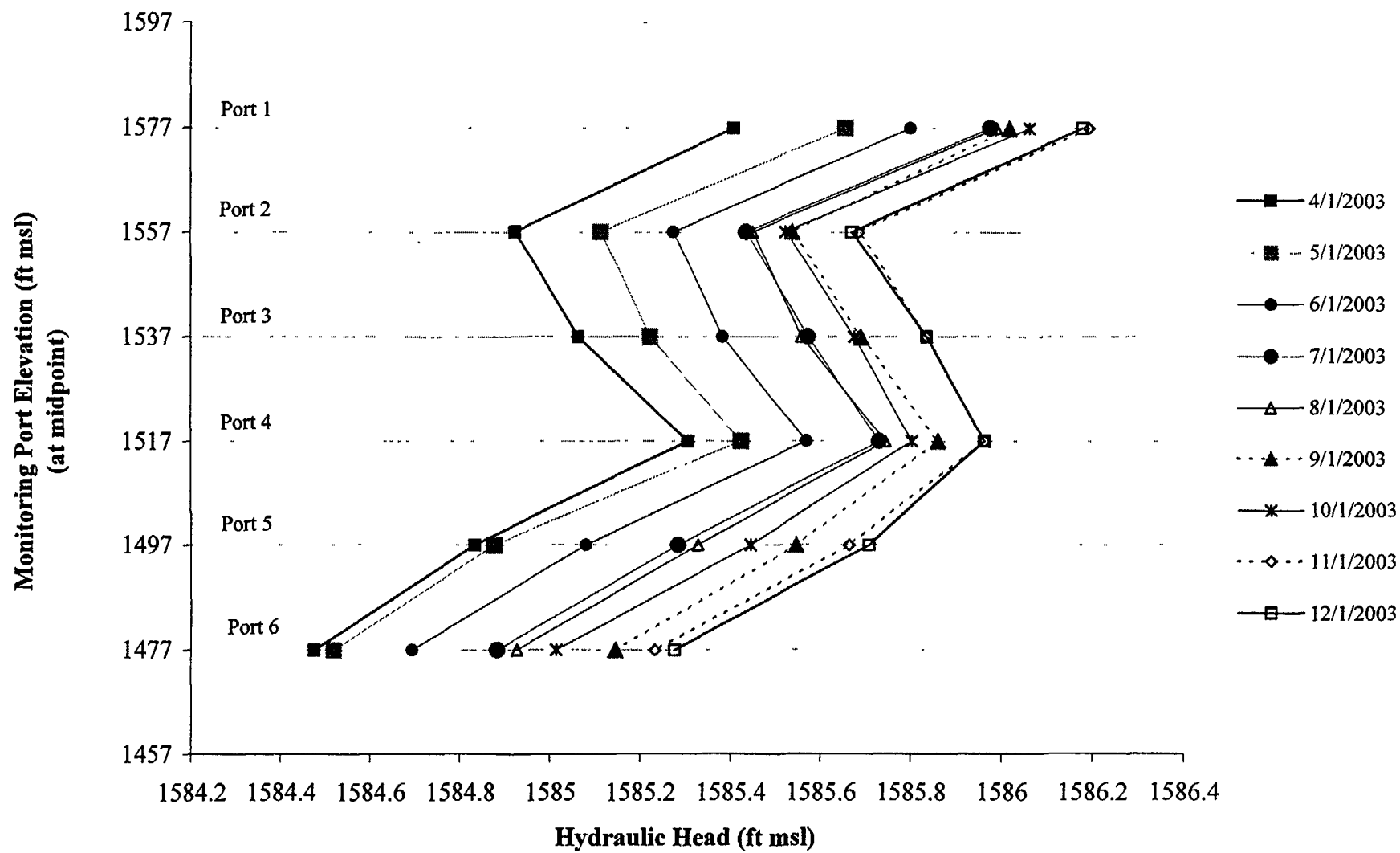


Figure A-241
Chatsworth Formation Well RD-50 FLUTe Transducer Measurements

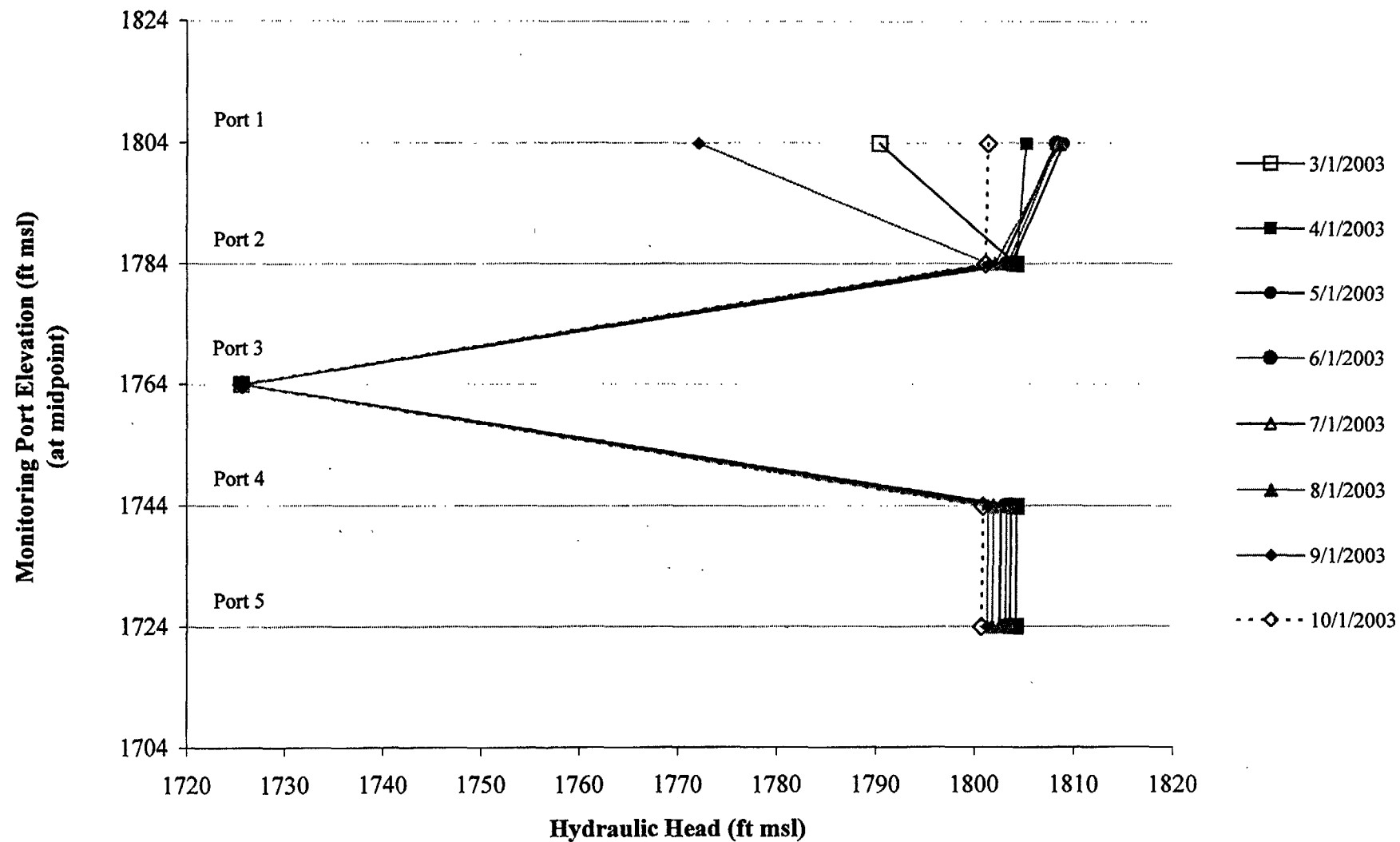


Figure A-242
Chatsworth Formation Well RD-53 FLUTE Transducer Measurements

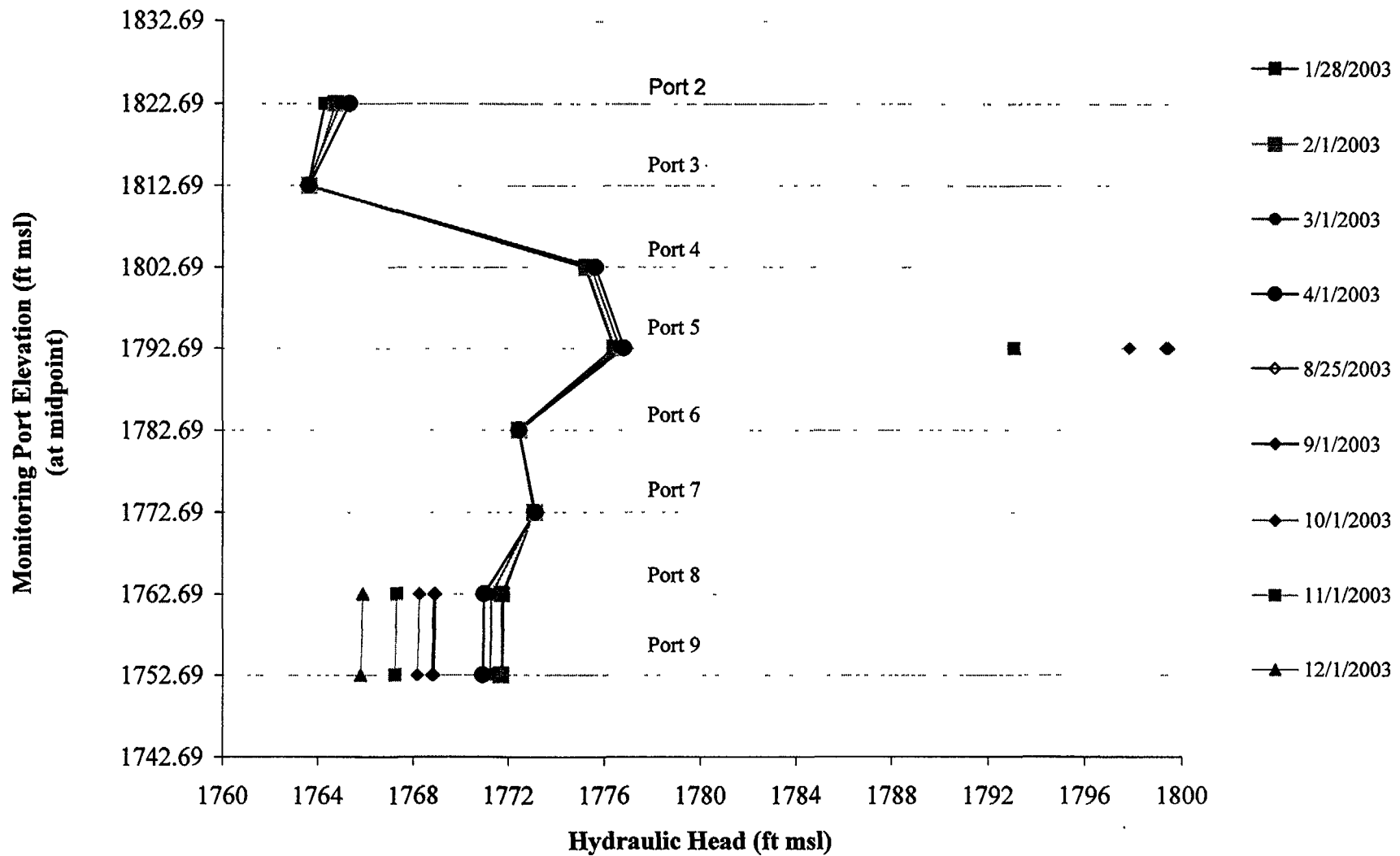


Figure A-243
Chatsworth Formation Well RD-54A FLUTe Transducer Measurements

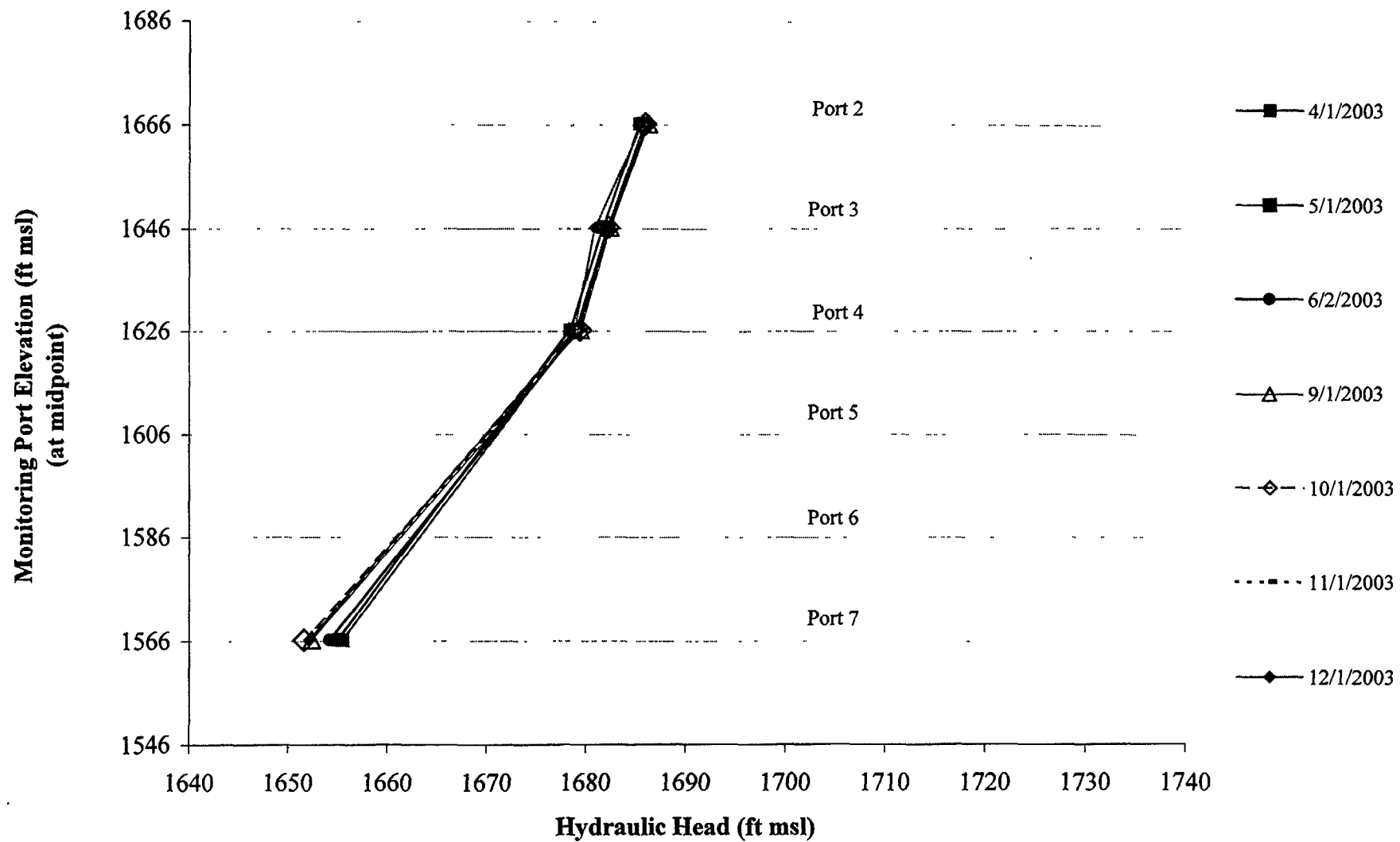


Figure A-244
Chatsworth Formation Well RD-57 FLUTE Transducer Measurements

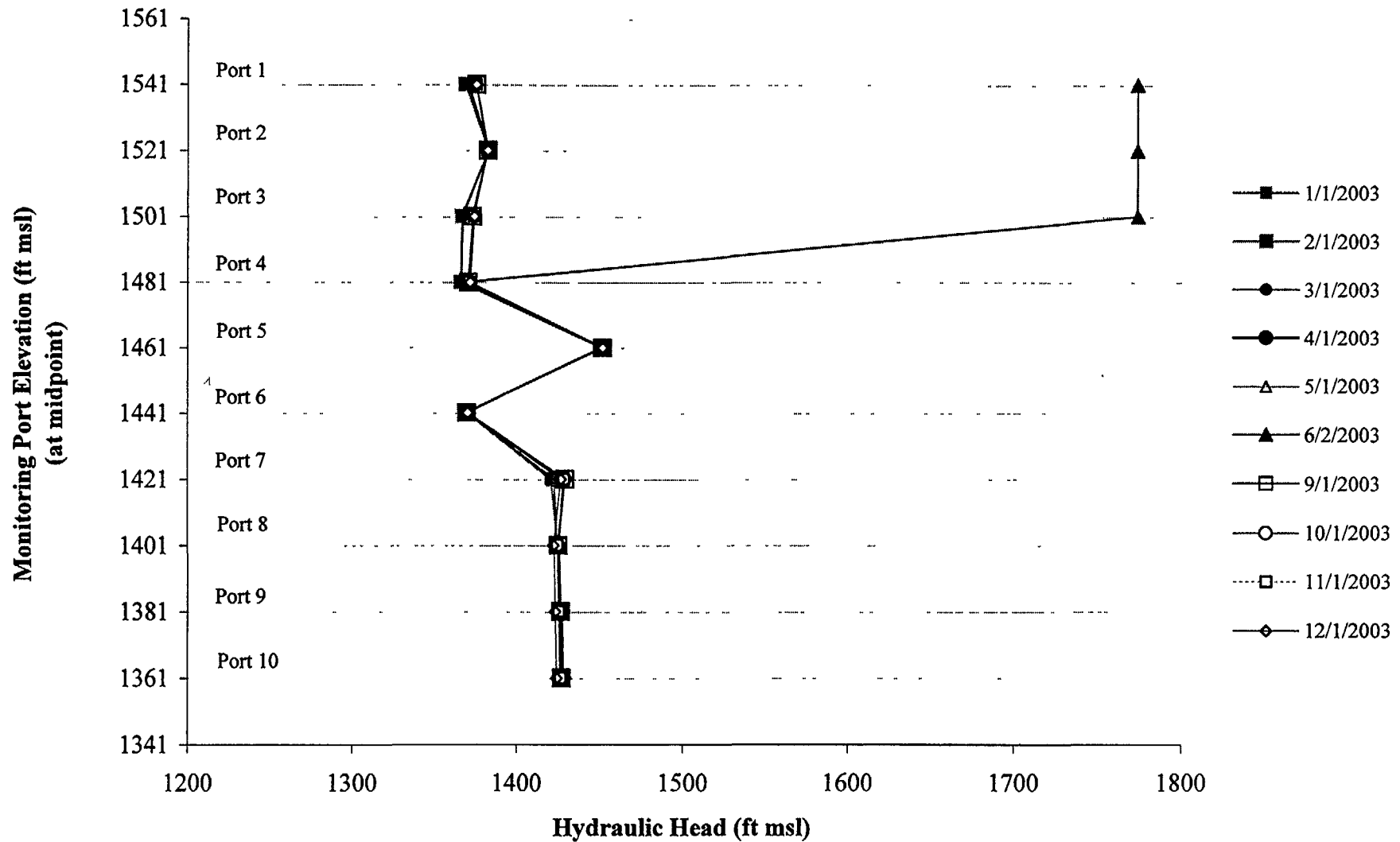


Figure A-245
Chatsworth Formation Well RD-64 FLUTE Transducer Measurements

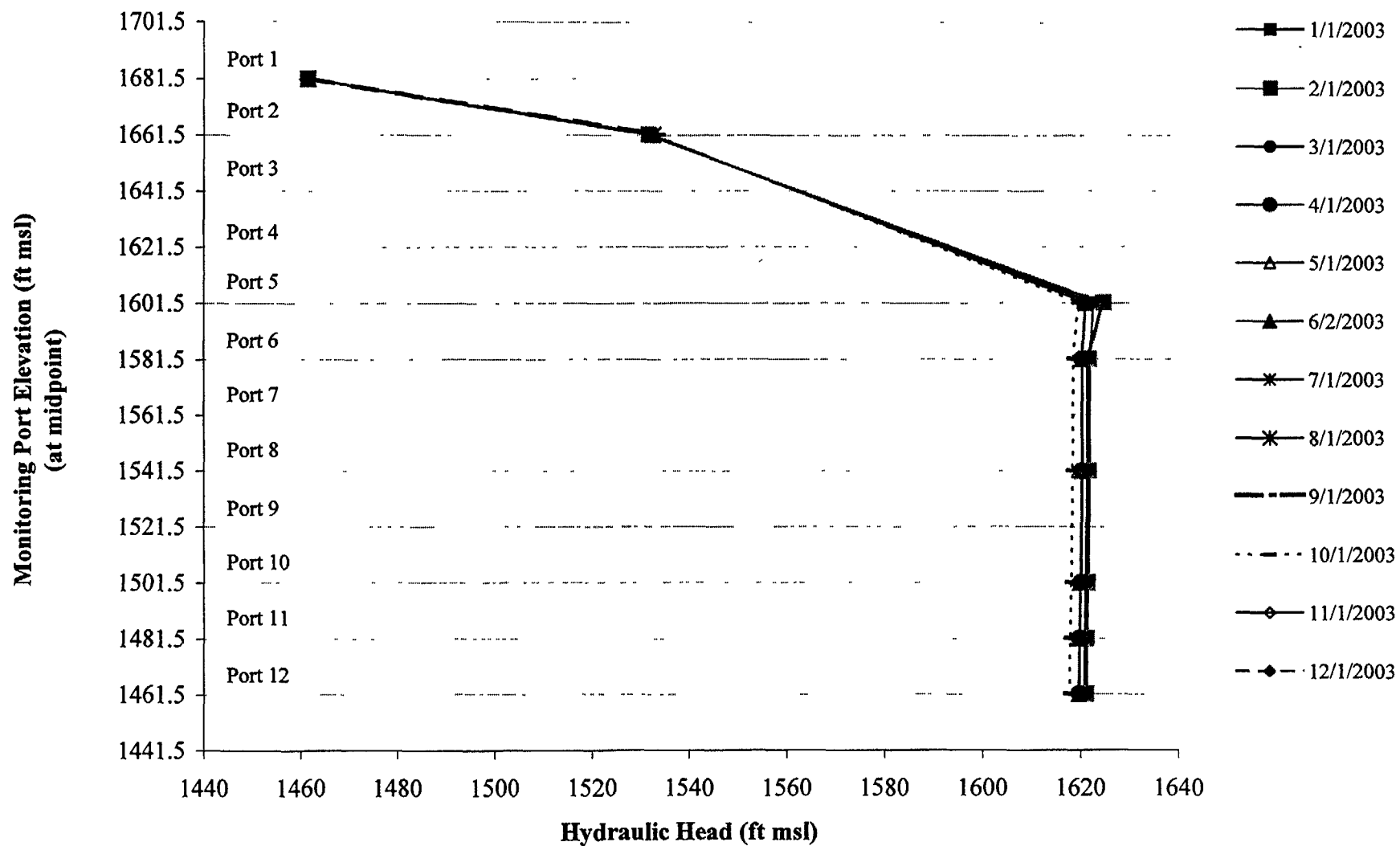


Figure A-246
Chatsworth Formation Well RD-65 FLUTE Transducer Measurements

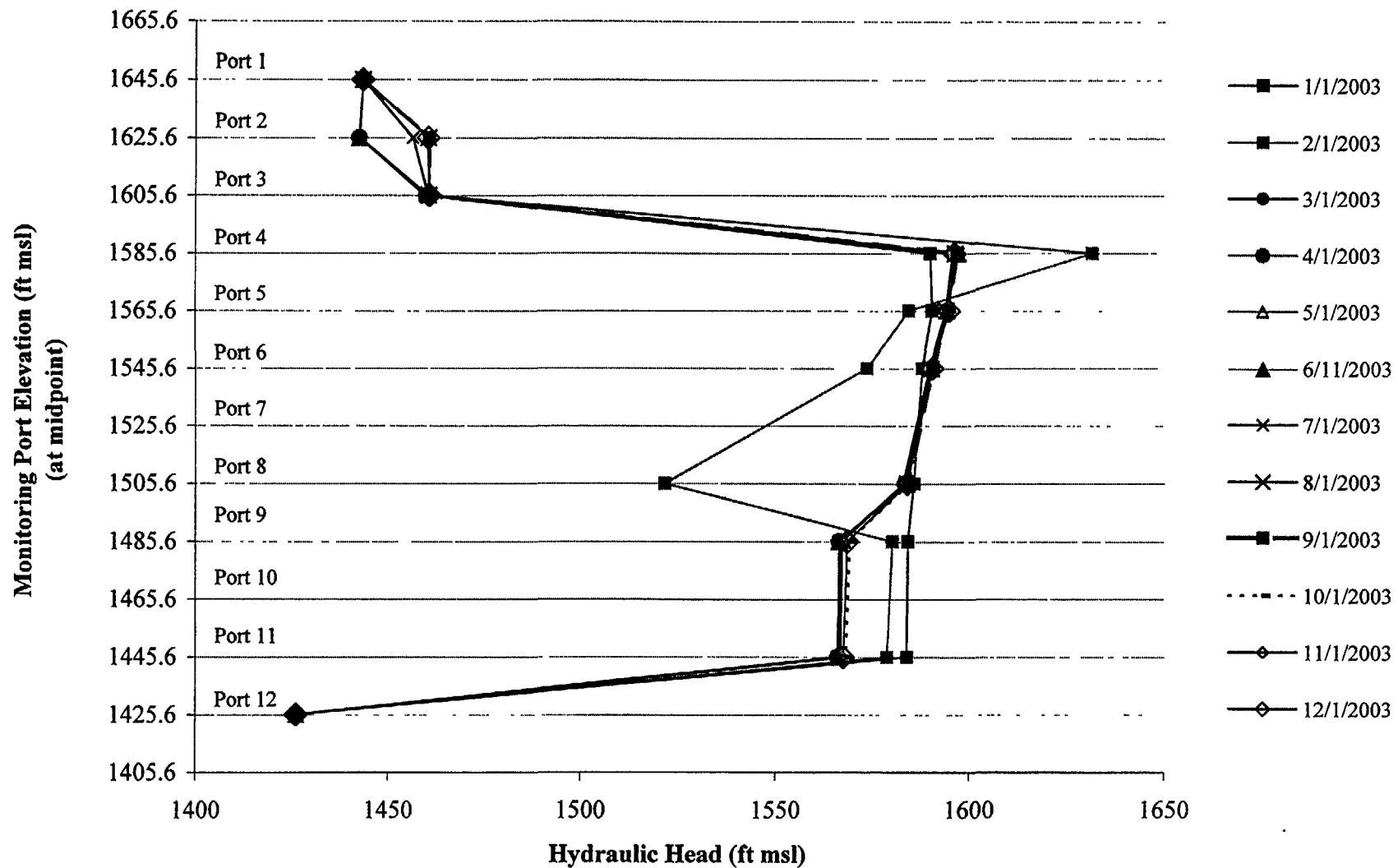


Figure A-247
Chatsworth Formation Well RD-72 FLUTe Transducer Measurements

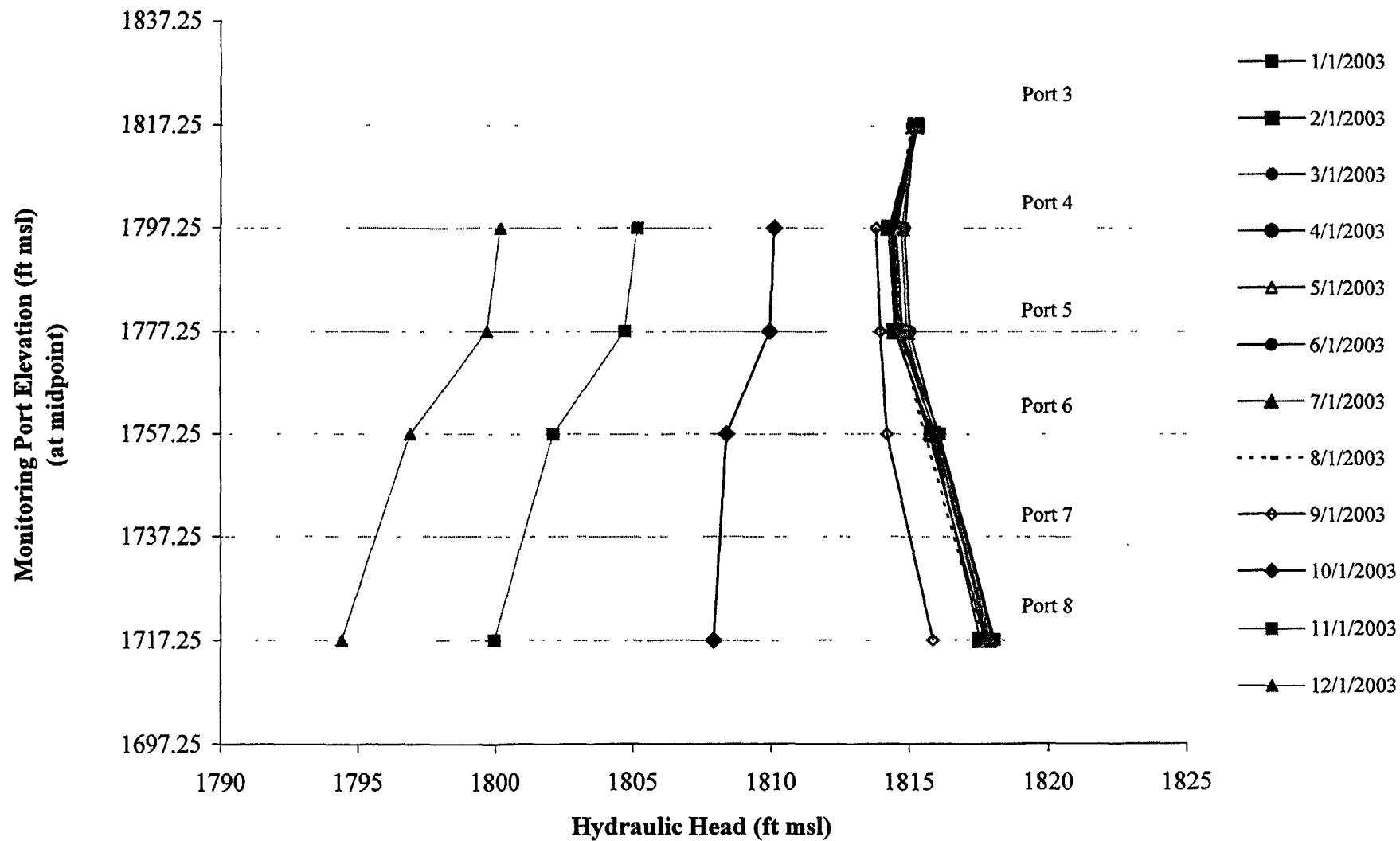


Figure A-248
Chatsworth Formation Well RD-73 FLUTE Transducer Measurements

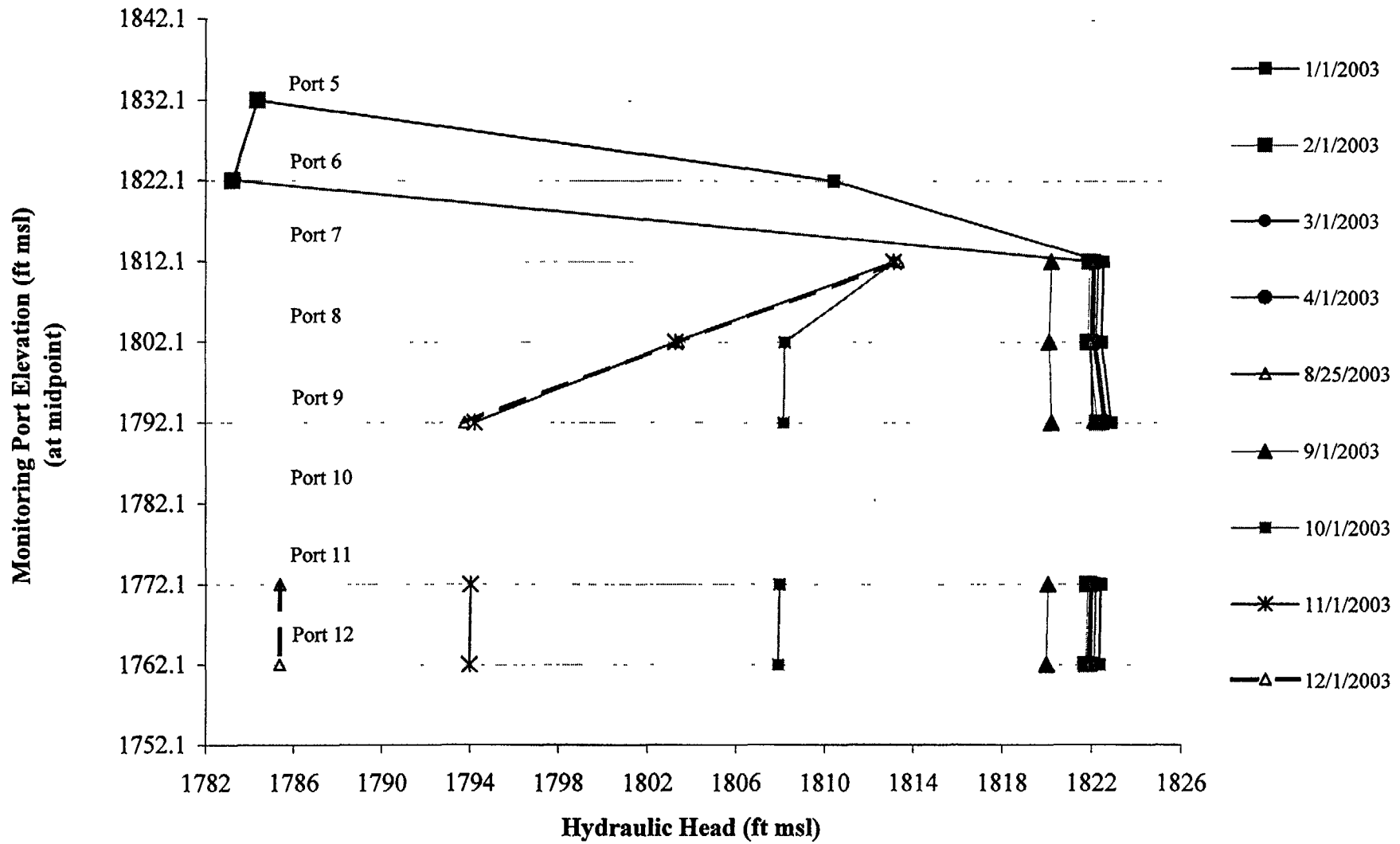


Figure A-249
Chatsworth Formation Well HAR-01 FLUTE Transducer Measurements

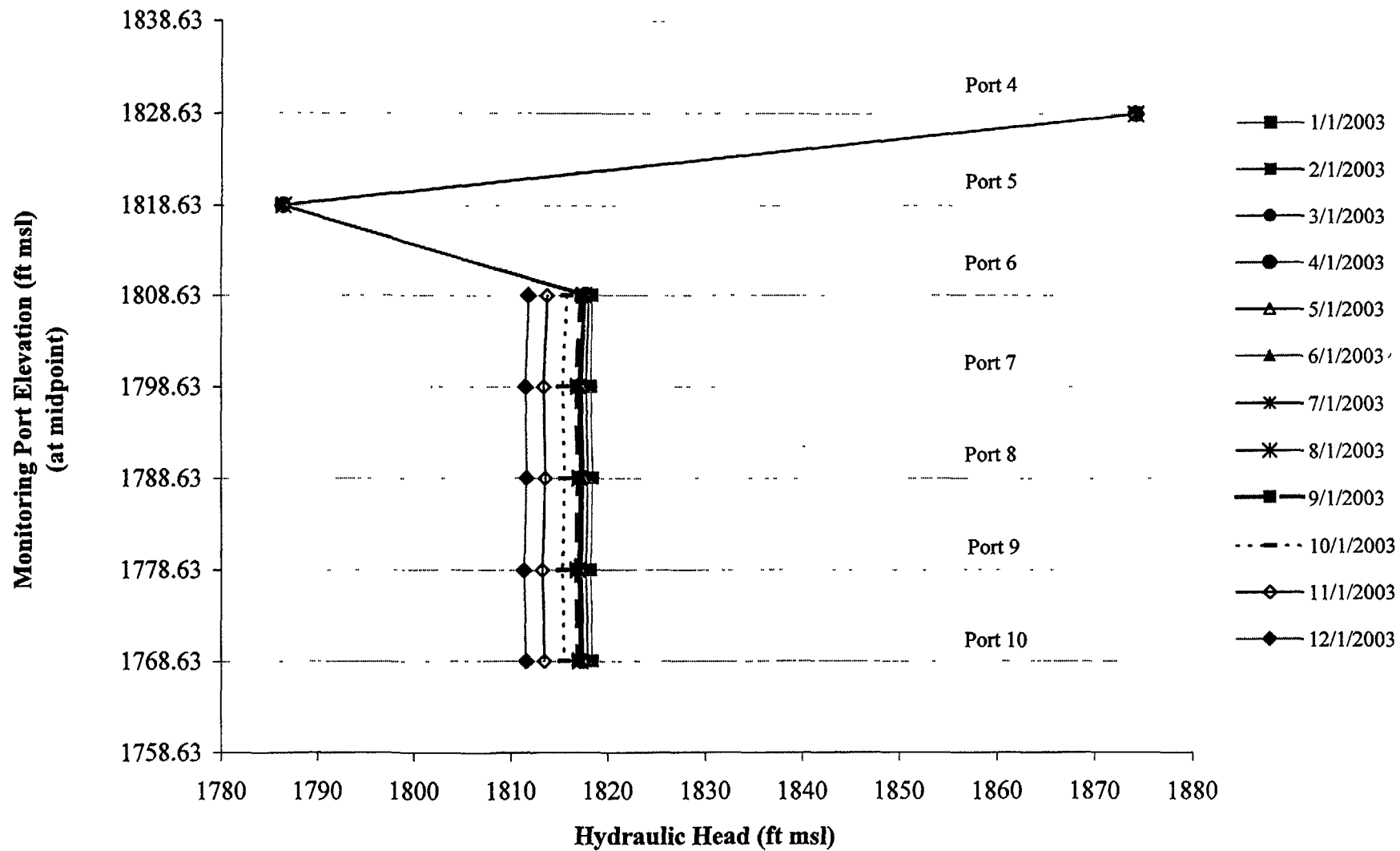


Figure A-250
Chatsworth Formation Well HAR-16 FLUTe Transducer Measurements

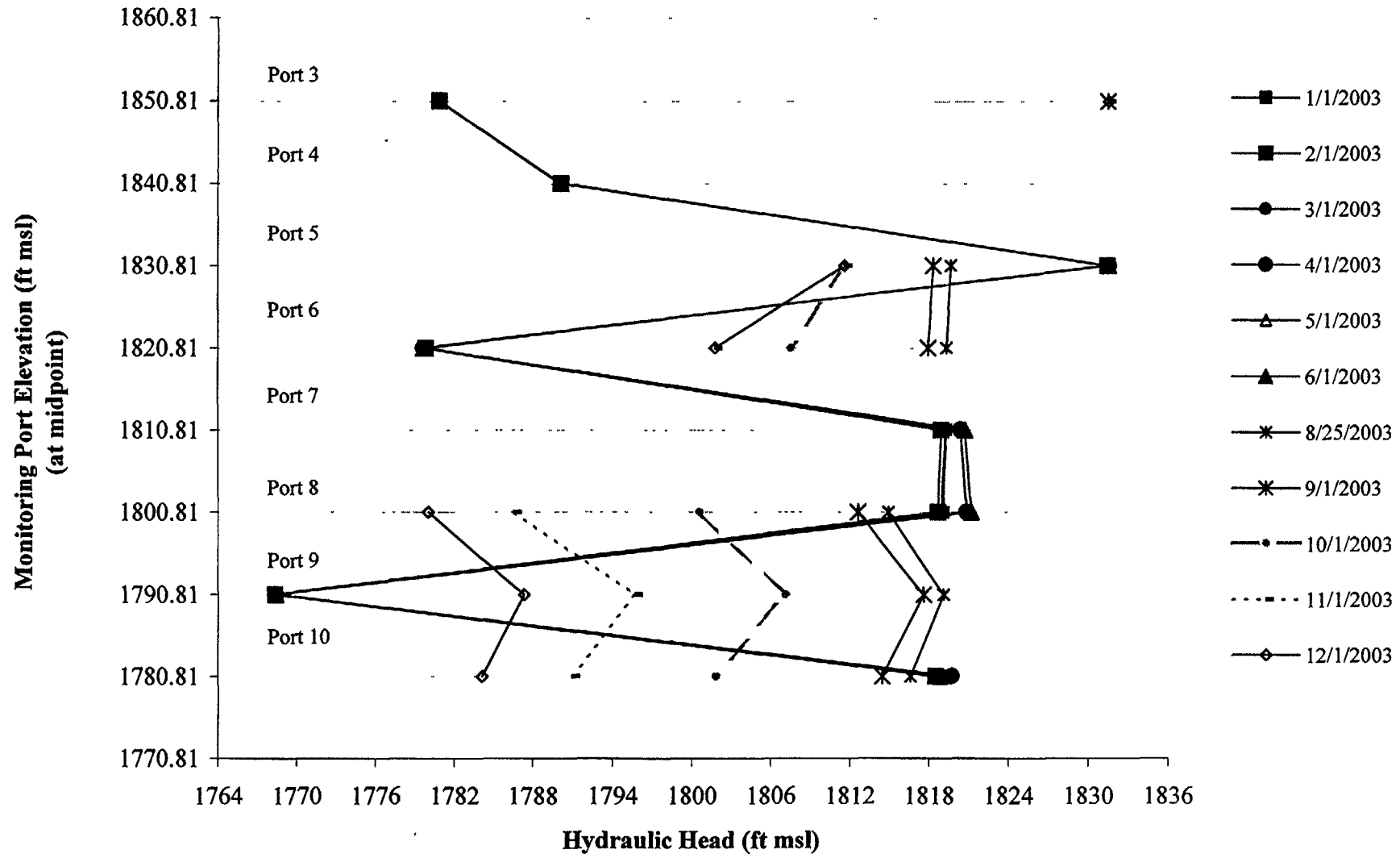
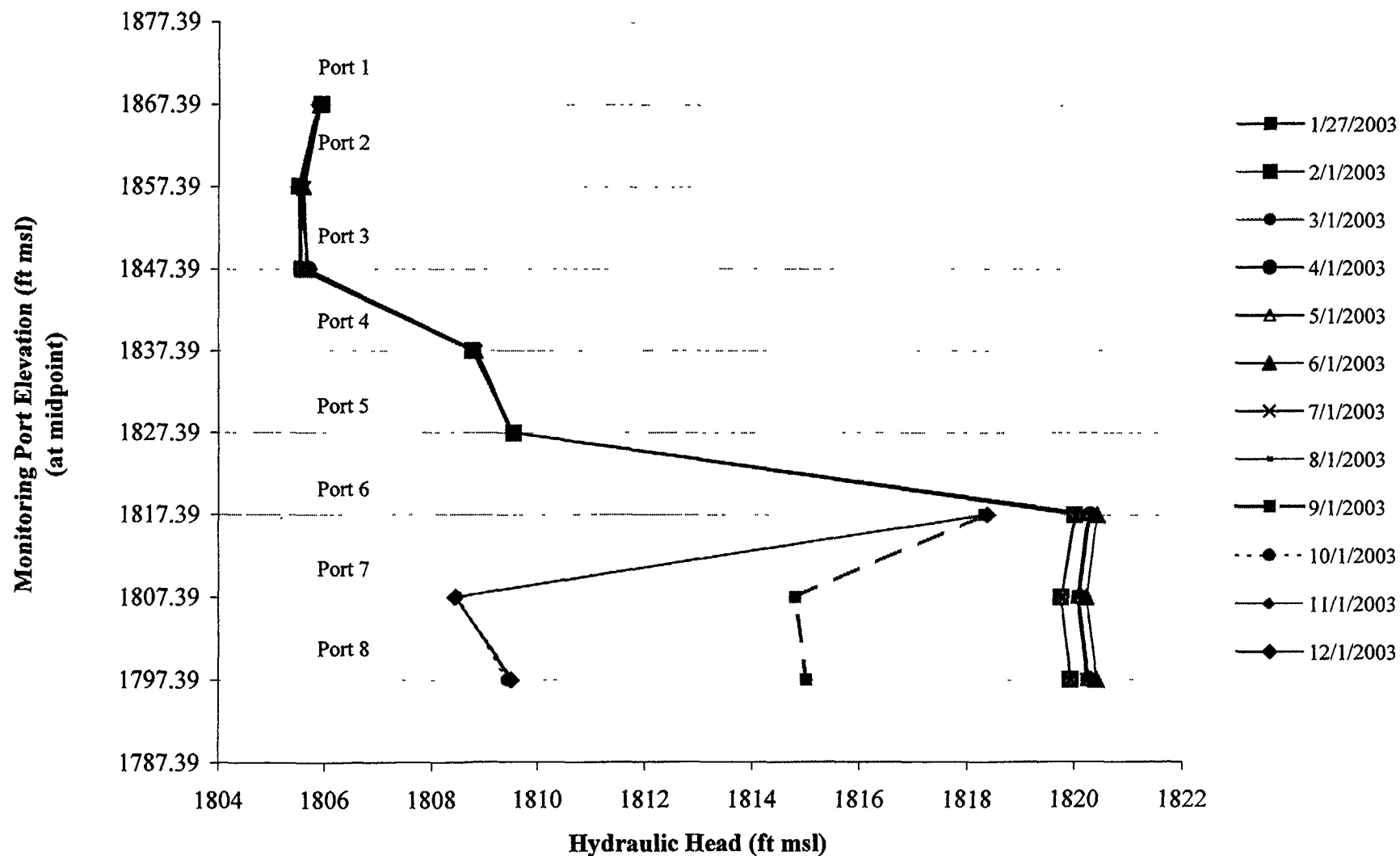
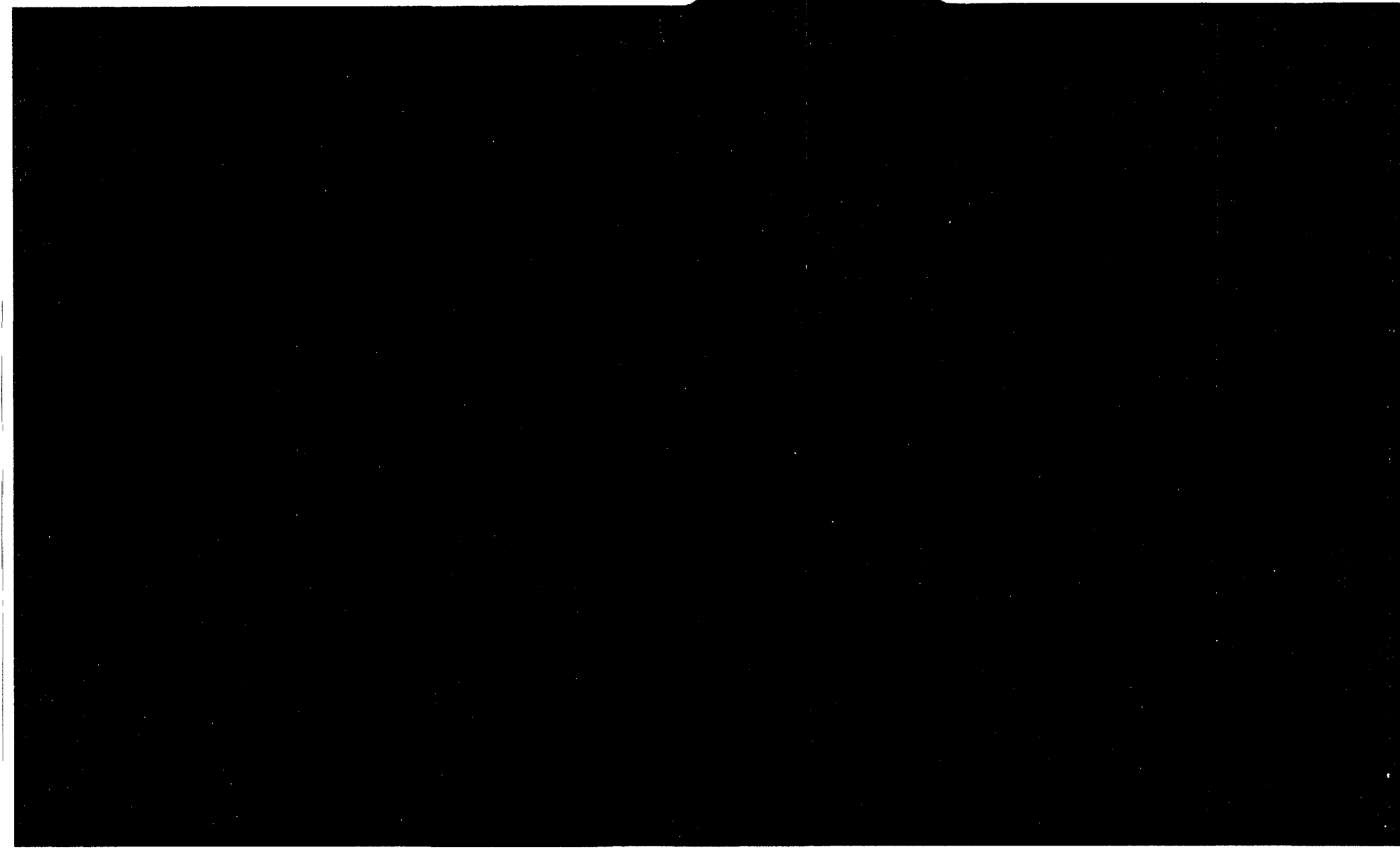


Figure A-251
Chatsworth Formation Well HAR-24 FLUTE Transducer Measurements



Appendix B



APPENDIX B

Groundwater Monitoring Schedule

APPENDIX B
GROUNDWATER MONITORING SCHEDULE

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B-III	2004 Annual Monitoring Schedule

APPENDIX B

GROUNDWATER MONITORING SCHEDULE

Groundwater Monitoring in 2003

The groundwater monitoring schedule for 2003 was initially presented in the 2002 Annual Groundwater Monitoring Report (Haley & Aldrich, Inc., *Report on Annual Groundwater Monitoring, 2002, Santa Susana Field Laboratory, Ventura County, California*, February 28, 2003). The proposed 2003 schedule (**Table B-I**) was subsequently modified and expanded during each sampling period in response to new data collected each quarter. **Table B-II** presents a summary of the actual analytical program conducted on the quarterly groundwater samples in 2003. The actual program varies from the proposed schedule due to groundwater level changes and requested additions to the monitoring schedule.

2004 Groundwater Monitoring Schedule

The 2004 schedule (**Table B-III**) reflects the programs in place to address numerous regulatory programs at the SSFL Facility, including surface impoundment closure, underground storage tank monitoring, evaluation monitoring, point of compliance monitoring, detection monitoring, background wells and interim corrective measures. The schedule also contains wells to be monitored as part of the general site characterization.

TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
SHALLOW SH WELLS							
SH-1	III	R					
SH-2	III	R					
SH-3	III	R	8260		8260		Evaluation monitoring
SH-4	III	R		App IX		8260	Point of compliance
SH-5	III	R					
SH-6	III	R					
SH-7	III	R					
SH-8	III	R					
SH-9	III	R					
SH-10	III	R					
SH-11	III	R	8260 Perchlorate		8260		Evaluation monitoring
ECL French- drain	III	R	8260		8260		Interim corrective action
SHALLOW RS WELLS							
RS-1	I	N	8260 8015 Perchlorate		8260 8015		Evaluation monitoring B/351
RS-2	I	N	Perchlorate				
RS-3	I	R					
RS-4	I	N					
RS-5	I	N					
RS-6	I	R	Perchlorate				
RS-7	I	N	8260		8260		Evaluation monitoring
RS-8	II	N		App IX		8260	Point of compliance
RS-9	III	R					
RS-10	II	N	8260 Perchlorate		8260		Evaluation monitoring
RS-11	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260		Evaluation monitoring
RS-12	III	R					
RS-13	II	N	8260 Perchlorate		8260		Evaluation monitoring
RS-14	III	R					
RS-15	III	N					
RS-16	IV	D	8260 Perchlorate 900.0 906.0				B/056 landfill
RS-17	III	R					

TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RS-18	IV	D	8260 Perchlorate 900.0 901.1 906.0 TM U, Th		8260 900.0 901.1 906.0 U,Th		FSDF
RS-19	I	N	8260 Perchlorate		8260		Evaluation monitoring
RS-20	I	R					
RS-21	II	R	8260		8260		Evaluation monitoring
RS-22	II	R					
RS-23	IV	D	8260 8015 Perchlorate 900.0 901.1 906.0 U				
RS-24	IV	D	Perchlorate 900.0 901.1 906.0 U				
RS-25	IV	D	Perchlorate 900.0 901.1 906.0 U				
RS-27	IV	D	Perchlorate				
RS-28	IV	D	8260 Perchlorate 900.0 901.1 906.0				RMHF
RS-29	II	R					
RS-30	I	R	8260 8015 Perchlorate		8260 8015		B/351
RS-31	I	R	8260 8015		8260 8015		B/351
RS-32	I	R	8260 8015		8260 8015		B/351
RS-54	IV	D	8260 TM Perchlorate 900.0 901.1 906.0, U, Th		8260 TM Perchlorate 900.0 901.1 906.0, U, Th		FSDF

See last page of Table B-I for footnotes and explanations.

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2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
SHALLOW ES WELLS							
ES-1	I	R	8260		8260		Interim corrective action
ES-2	I	R	8260 Perchlorate				
ES-3	I	R	8260		8260		Interim corrective action
ES-4	I	R	8260		8260		Interim corrective action
ES-5	I	R	8260		8260		Interim corrective action
ES-6	I	R	8260		8260		Interim corrective action
ES-7	I	R	8260		8260		Interim corrective action
ES-8	I	R					
ES-9	I	R	8260 Perchlorate				
ES-10	I	R	8260 Perchlorate				
ES-11	I	R	8260		8260		Interim corrective action
ES-12	I	R	8260 Perchlorate				
ES-13	I	R					
ES-14	III	R	8260		8260		Interim corrective action
ES-15	III	R					
ES-16	III	R					
ES-17	III	R	8260		8260		Interim corrective action
ES-18	II	R					
ES-19	II	R					
ES-20	II	R					
ES-21	II	R	8260		8260		Interim corrective action
ES-22	II	R	8260		8260		Interim corrective action
ES-23	III	R	8260		8260		Interim corrective action
ES-24	III	R	8260 Perchlorate		8260		Interim corrective action
ES-25	III	R					
ES-26	III	R	8260		8260		Interim corrective action
ES-27	III	R	8260		8260		Interim corrective action
ES-28	III	R					
ES-29	III	R					
ES-30	III	R	8260		8260		Interim corrective action
ES-31	IV	D	8260 Perchlorate 900.0 901.1 906.0				
ES-32	III	R	8260		8260		Interim corrective action
SHALLOW HAR WELLS							
HAR-2	I	R					
HAR-3	I	R	8260		8260		Evaluation monitoring
HAR-4	I	R	8260		8260		Interim corrective action
HAR-9	II	N					
HAR-11	II	N	8260 8015		8260		Evaluation monitoring

See last page of Table B-I for footnotes and explanations.

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TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
HAR-12	III	N					
HAR-13	II	N					
HAR-14	II	N		App IX		8260	Point of compliance
HAR-15	II	N		App IX		8260	Point of compliance
HAR-27	II	N	8260		8260		Evaluation monitoring
HAR-28	II	N					
HAR-29	II	R					
HAR-30	II	N					
HAR-31	II	N					
HAR-32	III	R					
HAR-33	III	R					
HAR-34	III	R					
CHATSWORTH FORMATION RD WELLS							
RD-1	I	R	8260 Perchlorate		8260 Perchlorate		Interim corrective action
RD-2	I	R	8260		8260		Interim corrective action
RD-3	I	N	8260		8260		Evaluation monitoring
RD-4	II	R	8260		8260		Interim corrective action
RD-5A	UL, S of Area II	N	8260		8260		Evaluation monitoring
RD-5B	UL, S of Area II	N	8260	8260	8260	8260	Detection monitoring
RD-5C	UL, S of Area II	N	8260	8260	8260	8260	Detection monitoring
RD-6	UL, S of Area II	N	8260	8260	8260	8260	Background
RD-7	IV	D	8260 900.0 901.1 906.0, U, Th		8260 900.0 906.0		B/056 landfill FLUTE sampling system
RD-8	III	R					
RD-9	II	R	8260		8260		Interim corrective action
RD-10	I	N	8260 Perchlorate		8260 Perchlorate		Evaluation monitoring FLUTE sampling system
RD-11	III	R					
RD-12	III	R					
RD-13	IV	D	8260	8260	8260	8260	Background
RD-14	IV	D	8260 Perchlorate				
RD-15	IV	D	8260 TM Perchlorate 900.0 901.1 906.0 U				
RD-16	IV	D	8260	8260	8260	8260	Detection monitoring

See last page of Table B-I for footnotes and explanations.

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TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-17	IV	D	8260 Perchlorate 900.0 901.1 906.0				RMHF
RD-18	IV	D	8260 Perchlorate	8260	8260	8260	Perimeter well
RD-19	IV	D	8260 Perchlorate	8260	8260	8260	Perimeter well
RD-20	IV	D	8260 Perchlorate				
RD-21	IV	D	8260 TM 900.0 901.1 906.0		8260 TM		FSDf FLUTe sampling system
RD-22	IV	D	8260, TM, CN 900.0 901.1 906.0	8260	8260	8260	FSDf Perimeter well
RD-23	IV	D	8260 TM 900.0 901.1 906.0		8260 TM		FSDf FLUTe sampling system
RD-24	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		B/059
RD-25	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		B/059
RD-26	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-27	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		RMHF
RD-28	IV	D	8260 Perchlorate 900.0 901.1 906.0, U, Th		8260 900.0 901.1 906.0		B/059

TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-29	IV	D	8260 Perchlorate 900.0 901.1 906.0 U				
RD-30	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		RMHF
RD-31	I	N	8260 Perchlorate				FLUTe sampling system
RD-32	Off-site, NE of Area I	N	8260 8015	8260	8260 8015	8260	Detection monitoring B/351
RD-33A	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0		8260		FSDf FLUTe sampling system
RD-33B	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0	8260	8260 906.0	8260	FSDf Perimeter well
RD-33C	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0	8260	8260 906.0	8260	FSDf Perimeter well
RD-34A	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0, U, Th		8260 906.0		RMHF
RD-34B	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0		8260 906.0		RMHF

See last page of Table B-I for footnotes and explanations.

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2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-34C	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0		8260 906.0		RMHF
RD-35A	I	N	8260				
RD-35B	I	N	8260				
RD-36A	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-36B	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-36C	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-36D	Off-site, NE of Area I	N	8260 8015		8260 8015		B/351
RD-37	Off-site, NE of Area I	N	8260 8015	8260	8260 8015	8260	Detection monitoring B/351
RD-38A	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-38B	Off-site, NE of Area I	N	8260 8015	8260	8260 8015	8260	B/351
RD-39A	Off-site, NE of Area I	N	8260	8260	8260	8260	Detection monitoring
RD-39B	Off-site, NE of Area I	N	8260	8260	8260	8260	Perimeter well
RD-40	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-41A	II	N	8260 Perchlorate				
RD-41B	II	N	8260 Perchlorate				

See last page of Table B-I for footnotes and explanations

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TABLE B-1
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-41C	II	N	8260 Perchlorate				
RD-42	II	N	8260 Perchlorate				
RD-43A	Off-site, Near Area I	N	8260 Perchlorate	8260	8260	8260	Detection monitoring
RD-43B	Off-site, Near Area I	N	8260 Perchlorate	8260	8260	8260	Detection monitoring
RD-43C	Off-site, Near Area I	N	8260 Perchlorate	8260	8260	8260	Detection monitoring
RD-44	I	N	8260	8260	8260	8260	Detection monitoring
RD-45A	I	N	8260		8260		Evaluation monitoring
RD-45B	I	N	8260		8260		Evaluation monitoring
RD-45C	I	N	8260		8260		Evaluation monitoring
RD-46A	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-46B	I	N	8260		8260		
RD-47	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-48A	UL, SW of Area I	N	8260	8260	8260	8260	Background
RD-48B	UL, SW of Area I	N	8260	8260	8260	8260	Background
RD-48C	UL, SW of Area I	N	8260	8260	8260	8260	Background
RD-49A	II	N	8260				
RD-49B	II	N	8260				
RD-49C	II	N	8260				
RD-50	IV	D	8260 8015		8260		Perimeter well FLUTe sampling system
RD-51A	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-51B	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-51C	II	N	8260	8260	8260	8260	Detection monitoring
RD-52A	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-52B	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-52C	I	N	8260	8260	8260	8260	Detection monitoring
RD-53	I	N	8260 8015 Perchlorate		8260 8015		B/351 FLUTe sampling system

See last page of Table B-1 for footnotes and explanations.

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TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-54A	IV	D	8260 TM 900.0 901.1 906.0, U, Th		8260 TM 906.0		FSDf FLUTe sampling system
RD-54B	IV	D	8260 TM 900.0 901.1 906.0		8260 TM 906.0		FSDf
RD-54C	IV	D	8260 TM 900.0 901.1 906.0		8260 TM 906.0		FSDf
RD-55A	III	N	8260 Perchlorate		8260		Evaluation monitoring
RD-55B	III	N	8260 Perchlorate		8260		Evaluation monitoring
RD-56A	UL, N of Area III	N	8260				
RD-56B	UL, N of Area III	N	8260	8260	8260 TM	8260	Perimeter well
RD-57	UL, NW of Area IV	D	8260 TM 900.0 901.1 906.0	8260	8260 906.0	8260	FSDf Perimeter well FLUTe sampling system
RD-58A	III	N	8260		8260		Evaluation monitoring
RD-58B	III	N	8260	8260	8260	8260	Detection monitoring
RD-58C	III	N	8260		8260		Evaluation monitoring
RD-59A	Off- site, W of Area IV	D	8260 TM Perchlorate 900.0 901.1 906.0	8260 Perchlorate	8260 TM Perchlorate 906.0	8260 Perchlorate	FSDf & RMHF Perimeter well
RD-59B	Off- site, W of Area IV	D	8260 TM Perchlorate 900.0 901.1 906.0	8260	8260 TM Perchlorate 906.0	8260	FSDf & RMHF Perimeter well
RD-59C	Off- site, W of Area IV	D	8260 TM Perchlorate 900.0 901.1 906.0	8260	8260 TM Perchlorate 906.0	8260	FSDf & RMHF Perimeter well
RD-60	III	N	8260		8260		Evaluation monitoring

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TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-61	I	N	8260	8260	8260	8260	Detection monitoring
RD-62	UL, S of Area I	N	8260	8260	8260	8260	Detection monitoring
RD-63	IV	D	8260 900.0 901.1 906.0		8260		RMHF Area IV extraction
RD-64	IV	D	8260 900.0 901.1 906.0 U				FSDf FLUTe sampling system
RD-65	IV	D	8260				FSDf FLUTe sampling system
RD-66	Off-site, NE of Area I	N	8260	8260	8260	8260	Perimeter well
RD-67	UL, S of Area IV	N	8260		8260		Perimeter well
RD-68A	Off-site, N of Area III	N	8260	8260	8260	8260	Perimeter well
RD-68B	Off-site, N of Area III	N	8260	8260	8260	8260	Perimeter well
RD-69	I	N	8260		8260		Perimeter well
RD-70	UL, N of Area II	N	8260	8260	8260	8260	Perimeter well
RD-71	Off-site, NE of Area I	N	8260	8260	8260	8260	Perimeter well
RD-72	I	N	8260				FLUTe sampling system
RD-73	I	R	8260 8015 Perchlorate				UT 37 FLUTe sampling system
RD-74	IV	D	8260	8260	8260	8260	B/056
CHATSWORTH FORMATION HAR WELLS							
HAR-1	I	R	Perchlorate				FLUTe sampling system
HAR-5	II	R	Perchlorate				
HAR-6	II	N	8260 Perchlorate				
HAR-7	II	R		App IX		8260	Point of compliance
HAR-8	II	N					
HAR-16	I	R		App IX		8260	Point of compliance FLUTe sampling system
HAR-17	II	R		App IX		8260	Point of compliance
HAR-18	III	R	8260		8260		Interim corrective action
HAR-19	II	R	8260				
HAR-20	II	N	8260				

See last page of Table B-I for footnotes and explanations.

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TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
HAR-21	II	R	8260 Perchlorate				
HAR-22	II	N	8260 Perchlorate		8260		Evaluation monitoring
HAR-23	III	R	8260 Perchlorate		8260		Evaluation monitoring
HAR-24	I	R	8260		8260		Evaluation monitoring FLUTE sampling system
HAR-25	I	N	8260 Perchlorate				
HAR-26	III	R	8260		8260		Evaluation monitoring
CHATSWORTH FORMATION WS WELLS							
WS-4A	I	N	8260	8260	8260	8260	Detection monitoring
WS-5	I	R	8260		8260		Interim corrective action
WS-6	I	R	8260		8260		Interim corrective action
WS-7	IV	D					
WS-8	III	R					
WS-9	II	R	8260		8260		Interim corrective action
WS-9A	II	R	8260		8260		Interim corrective action
WS-9B	II	R					
WS-11	III	R					
WS-12	I	R					
WS-13	II	R					
WS-14	I	R					
WS-SP	II	N					
OFF-SITE OS WELLS AND SPRINGS							
OS-2	Off-Site	R	8260 Perchlorate				
OS-3	Off-Site	R	Perchlorate				
OS-4	Off-Site	R	8260 Perchlorate				
OS-5	Off-Site	R	Perchlorate				
OS-8	Off-Site	N	8260 Perchlorate				
OS-10	Off-Site	R	Perchlorate				
OS-12	Off-Site	N	Perchlorate				
OS-13	Off-Site	N	8260 Perchlorate		8260		
OS-15	Off-Site	N	8260 Perchlorate				
OS-16	Off-Site	N	8260 Perchlorate		8260 Perchlorate		
OS-17	Off-Site	N	8260 Perchlorate		8260 Perchlorate		
OS-21	Off-Site	R	8260 Perchlorate				
OS-24	Off-Site	N	8260		8260		FLUTE sampling system
OS-25	Off-Site	N	8260 Perchlorate		8260		

See last page of Table B-I for footnotes and explanations.

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TABLE B-I
2003 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Monitoring Program
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
OS-26	Off-Site	N	8260 Perchlorate		8260		
OS-27	Off-Site	N	8260 Perchlorate				

ANALYTICAL METHODS
2003 MONITORING SCHEDULE

Analytes/EPA Methodology

8260	=	EPA method 8260 for volatile organic compounds (most recent version).
8270	=	EPA method 8270 for base/neutral and acid organic compounds.
8015	=	EPA method 8015 modified for fuel hydrocarbons.
CN	=	Cyanide, EPA method 9012.
TM	=	Trace metals, including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc using EPA methods 6010 and 6020.
Perchlorate	=	EPA method 314.0.

Appendix IX

Note: The laboratory uses the most current methods which may be updated from methods listed in Appendix IX (Code of Federal Regulations, Title 40, Part 264, Appendix IX, Ground-water Monitoring List).

8081	=	EPA method 8081 for pesticides.
8082	=	EPA method 8082 for PCBs.
8141A	=	EPA method 8141A for organophosphorus pesticides.
8151A	=	EPA method 8151A for herbicides.
8260	=	EPA method 8260 for expanded list of volatile organic compounds.
8270	=	EPA method 8270 for base/neutral and acid organic compounds.
8290	=	EPA method 8290 for dioxins and furans.
Metals	=	EPA method 6020 series for metals.
CN	=	EPA method 9012 for cyanide.
Sulfide	=	EPA method 376.2 for sulfide.

Radiochemical Parameters

900.0	=	EPA method 900.0 for gross alpha and beta radioactivity
901.1	=	EPA method 901.1 for gamma-emitting radionuclides
906.0	=	EPA method 906.0 for tritium
U	=	EPA method 907.0 for isotopic uranium
Th	=	EPA method 907.0 for isotopic thorium

Note: An equivalent or superior in-house laboratory procedure will be considered acceptable for EPA methodology. Lab will use the most current promulgated version of each EPA method.

Evaluation Monitoring

Evaluation monitoring wells, including the point of compliance wells, will be sampled at least annually for EPA method 8260, which will detect the constituents specified in Table 5 of the post-closure permit: tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, vinyl chloride, carbon tetrachloride, methylene chloride, chloroform, 2-butanone, benzene, toluene, xylenes, and ethylbenzene.

Point of compliance wells also will be sampled at least every other year for a full suite of Appendix IX parameters. The sampling schedule will be 1993, 1995, 1997...etc., for all wells. The analytical parameters are listed in 40 CFR 264, Appendix IX. During off-years, wells will be sampled for a modified Appendix IX list annually (standard list of constituents for EPA methods 8260 and 8270, plus 1,4-dioxane, nitrobenzene, 1,3-dinitrobenzene, and N-nitrosodimethylamine).

Detection Monitoring

Detection monitoring wells will be sampled quarterly for EPA method 8260, which will detect the constituents specified in Table 6 of the post-closure permit: tetrachloroethene, trichloroethene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, 1,1-dichloroethene, 1,1-dichloroethane, 1,2-dichloroethane, vinyl chloride, carbon tetrachloride, methylene chloride, and chloroform.

Interim Corrective Action Monitoring

All extraction wells will be included in the interim corrective action monitoring. These wells will be sampled annually for EPA method 8260, which will detect the constituents specified in Table 5 of the post-closure permit. The constituents are listed above under "Evaluation Monitoring."

Area IV Monitoring

Area IV sampling schedule subject to revision.

Note: U = Isotopic uranium, to be analyzed using EPA method 907.0
 Th = Isotopic thorium, to be analyzed using EPA method 907.0

Background Monitoring

The five background wells will be sampled quarterly for the expanded list of monitoring parameters (EPA method 8260) specified in Table 5 of the post-closure permit.

Background wells are sampled every five years for the constituents of concern (Table 3 of the post closure permit) on a schedule that will follow 1994, 1999, ... etc. The background wells and the detection monitoring wells were all sampled for constituents of concern in 1996. The background wells were sampled again for constituents of concern in 1999. Background wells and detection monitoring wells were sampled for constituents of concern in 2000.

Notes: F = Fluoride, EPA method 300.0
 8270 = EPA method 8270 for acid and base/neutral semi-volatile compounds, including N-nitrosodimethylamine (NDMA), nitrobenzene, and 1,3-dinitrobenzene
 Ammonia = Ammonia, EPA method 350.2
 Formaldehyde = Formaldehyde, EPA method 8315
 NO₃ = Nitrate, EPA method 300.0
 1,4-dioxane = 1,4-dioxane, EPA method 8260SIM for volatile organic compounds

FLUTe Sampling System

FLUTe sampling system - indicates wells that currently are, or will be, equipped with FLUTe multi-port sampling systems in 2003. Samples will be collected from the FLUTe multi-port sampling systems per the previously approved workplan(s).

Laboratory Services

Laboratories will be certified by the State of California for the appropriate analytical methods.

During sampling, the field parameters of turbidity, pH, temperature and specific conductance will be measured.

REFERENCES USED IN PREPARING
2003 MONITORING SCHEDULE

1. California Department of Toxic Substances Control, 1994. Correspondence to Rocketdyne Environmental Protection Department, *Request for Modification of Analytical Parameters for Appendix IX Sampling - EPA ID Numbers CAD093365435 and CA18000900100 - Santa Susana Field Laboratory (SSFL) Rocketdyne Division Facility, Santa Susana, California*. 13 September 1994.
2. ----- 1995. *Hazardous Waste Facility Post-Closure Permit, Regional Permit No. PC-94/95-3-02 and PC-94/95-3-03*. Permits for Areas I and III and Area II, effective 11 May 1995.
3. 40 CFR 264. Code of Federal Regulations, Title 40, Part 264, Appendix IX, *Groundwater Monitoring List* and Part 265, §265.92, *Sampling and Analysis*.

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**SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA**

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
Shallow Wells				
SH-03		05/02/03	8260B	Primary
SH-04		04/14/03	App IX	Primary
SH-04		04/14/03	8260B	Split
SH-11		02/21/03	314.0	Primary
SH-11		02/21/03	8260B	Primary
SH-11		08/25/03	8260B	Primary
SH-11		08/25/03	8260B	Dup
RS-07		02/21/03	314.0	Primary
RS-07		02/21/03	8260B	Primary
RS-07		08/22/03	8260B	Primary
RS-08		04/14/03	App IX	Primary
RS-08		04/14/03	8260B	Split
RS-10		02/26/03	314.0	Primary
RS-10		02/26/03	8260B	Primary
RS-10		02/26/03	8260B	Dup
RS-11		05/01/03	314.0	Primary
RS-11		05/01/03	8260B	Primary
RS-11		05/01/03	900.0	Primary
RS-11		05/01/03	901.1	Primary
RS-11		05/01/03	906.0	Primary
RS-11		05/01/03	8260B	Dup
RS-13		02/21/03	314.0	Primary
RS-13		02/21/03	8260B	Primary
RS-13		02/21/03	8260B	Dup
RS-15		02/26/03	314.0	Primary
RS-17		02/26/03	314.0	Primary
RS-18		05/02/03	314.0	Primary
RS-18		05/02/03	6020	Primary
RS-18		05/02/03	7470A	Primary
RS-18		05/02/03	8260B	Primary
RS-18		05/02/03	900.0	Primary
RS-18		05/02/03	901.1	Primary
RS-18		05/02/03	906.0	Primary
RS-18		05/02/03	907.0-Th	Primary
RS-18		05/02/03	908.0-U	Primary
RS-19		05/01/03	314.0	Primary
RS-19		05/01/03	8260B	Primary
RS-25		02/25/03	314.0	Primary
RS-25		02/25/03	900.0	Primary
RS-25		02/25/03	901.1	Primary
RS-25		02/25/03	906.0	Primary
RS-25		02/25/03	908.0-U	Primary
RS-25		05/01/03	314.0	Primary
RS-25		05/01/03	314.0	Split
RS-25		05/01/03	314.0	Dup
RS-30		05/01/03	314.0	Primary
RS-30		05/01/03	8015	Primary

See last page of Table B-II for footnotes and explanations.

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 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RS-30		05/01/03	8260B	Primary
RS-31		05/01/03	8015	Primary
RS-31		05/01/03	8260B	Primary
RS-32		02/25/03	8015	Primary
RS-32		02/25/03	8260B	Primary
ES-03		12/10/03	8260B	Primary
ES-04		05/14/03	8260B	Primary
ES-05		05/14/03	8260B	Primary
ES-06		05/14/03	8260B	Primary
ES-09		05/01/03	314.0	Primary
ES-09		05/01/03	8260B	Primary
ES-10		05/01/03	314.0	Primary
ES-10		05/01/03	8260B	Primary
ES-11		05/14/03	8260B	Primary
ES-12		02/27/03	314.0	Primary
ES-12		02/27/03	8260B	Primary
ES-17		05/16/03	8260B	Primary
ES-17		08/25/03	8260B	Primary
ES-22		12/10/03	8260B	Primary
ES-23		02/20/03	8260B	Primary
ES-23		08/25/03	8260B	Primary
ES-26		02/20/03	8260B	Primary
ES-26		08/25/03	8260B	Primary
ES-27		02/20/03	8260B	Primary
ES-27		08/25/03	8260B	Primary
ES-30		02/20/03	8260B	Primary
ES-30		02/20/03	8260B	Split
ES-30		08/25/03	8260B	Primary
ES-31		02/19/03	314.0	Primary
ES-31		02/19/03	8260B	Primary
ES-31		02/19/03	900.0	Primary
ES-31		02/19/03	901.1	Primary
ES-31		02/19/03	906.0	Primary
ES-32		05/16/03	8260B	Primary
HAR-03		02/13/03	8260B	Primary
HAR-04		05/14/03	8260B	Primary
HAR-11		02/27/03	8015	Primary
HAR-11		02/27/03	8260B	Primary
HAR-11		08/25/03	8260B	Primary
HAR-14		04/15/03	App IX	Primary
HAR-14		04/15/03	8260SIM	Split
HAR-14		12/03/03	8260B	Primary
HAR-15		04/15/03	App IX	Primary
HAR-15		12/03/03	8260B	Primary
HAR-15		12/03/03	8260B	Dup
HAR-27		02/13/03	8260B	Primary
HAR-27		12/09/03	8260B	Primary

See last page of Table B-II for footnotes and explanations.

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QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
Near Surface Groundwater Piezometers				
PZ-012	E	12/09/03	314.0	Primary
PZ-012	F	12/09/03	314.0	Primary
Chatsworth Formation Wells				
RD-01		05/07/03	314.0	Primary
RD-01		05/07/03	COCs	Primary
RD-02		02/04/03	314.0	Primary
RD-02		02/04/03	COCs	Primary
RD-02		05/05/03	314.0	Primary
RD-02		05/05/03	COCs	Primary
RD-02		08/11/03	314.0	Primary
RD-02		08/11/03	8260SIM	Primary
RD-02		08/11/03	COCs	Primary
RD-02		11/19/03	314.0	Primary
RD-02		11/19/03	COCs	Primary
RD-02		11/19/03	8260B	Dup
RD-03		02/18/03	314.0	Primary
RD-03		02/18/03	8260B	Primary
RD-03		02/18/03	8260B	Dup
RD-03		08/15/03	8260B	Primary
RD-04		02/03/03	314.0	Primary
RD-04		02/03/03	COCs	Primary
RD-04		05/07/03	COCs	Primary
RD-04		05/07/03	314.0	Primary
RD-04		05/07/03	8260SIM	Split
RD-04		08/20/03	314.0	Primary
RD-04		08/20/03	COCs	Primary
RD-04		11/20/03	314.0	Primary
RD-04		11/20/03	COCs	Primary
RD-05A		01/31/03	8260B	Primary
RD-05A		08/07/03	8260B	Primary
RD-05B		01/31/03	8260B	Primary
RD-05B		05/09/03	8260B	Primary
RD-05B		05/09/03	8260B	Dup
RD-05B		08/08/03	8260B	Primary
RD-05B		11/10/03	8260B	Primary
RD-05B		11/10/03	8260B	Split
RD-05B		11/10/03	8260B	Dup
RD-05C		01/31/03	8260B	Primary
RD-05C		05/09/03	8260B	Primary
RD-05C		08/08/03	8260B	Primary
RD-05C		11/11/03	8260B	Primary
RD-06		02/18/03	8260B	Primary
RD-06		05/09/03	8260B	Primary
RD-06		08/20/03	8260B	Primary
RD-07	Z3	01/29/03	908.0-U	Primary
RD-07	Z3	01/29/03	8260B	Primary
RD-07	Z3	01/29/03	900.0	Primary

See last page of Table B-II for footnotes and explanations.

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-07	Z3	01/29/03	901.1	Primary
RD-07	Z3	01/29/03	906.0	Primary
RD-07	Z3	01/29/03	907.0-Th	Primary
RD-07	Z13	08/28/03	8260B	Primary
RD-07	Z13	08/28/03	900.0	Primary
RD-07	Z13	08/28/03	903.1	Primary
RD-07	Z13	08/28/03	904.0	Primary
RD-07	Z13	08/28/03	906.0	Primary
RD-09		02/26/03	8260B	Primary
RD-10	Comp	01/28/03	314.0	Primary
RD-10	Comp	01/28/03	COCs	Primary
RD-10	Comp	04/30/03	314.0	Primary
RD-10	Comp	04/30/03	COCs	Primary
RD-13		02/07/03	8260B	Primary
RD-13		02/07/03	8260B	Dup
RD-13		05/13/03	8260B	Primary
RD-13		11/12/03	8260B	Primary
RD-13		11/12/03	8260B	Split
RD-14		02/26/03	314.0	Primary
RD-14		02/26/03	8260B	Primary
RD-15		02/26/03	314.0	Primary
RD-15		02/26/03	6020	Primary
RD-15		02/26/03	7470A	Primary
RD-15		02/26/03	8260B	Primary
RD-15		02/26/03	900.0	Primary
RD-15		02/26/03	901.1	Primary
RD-15		02/26/03	906.0	Primary
RD-15		02/26/03	908.0-U	Primary
RD-16		02/26/03	8260B	Primary
RD-16		05/13/03	8260B	Primary
RD-16		05/13/03	8260B	Split
RD-16		08/15/03	8260B	Primary
RD-16		11/10/03	8260B	Primary
RD-17		02/24/03	314.0	Primary
RD-17		02/24/03	8260B	Primary
RD-17		02/24/03	900.0	Primary
RD-17		02/24/03	901.1	Primary
RD-17		02/24/03	906.0	Primary
RD-18		02/17/03	314.0	Primary
RD-18		02/17/03	8260B	Primary
RD-18		05/13/03	8260B	Primary
RD-18		08/14/03	8260B	Primary
RD-18		11/19/03	8260B	Primary
RD-19		02/26/03	314.0	Primary
RD-19		02/26/03	8260B	Primary
RD-19		05/06/03	8260B	Primary
RD-19		05/06/03	8260B	Dup
RD-19		08/14/03	8260B	Primary

See last page of Table B-II for footnotes and explanations.

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QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA**

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-19		12/10/03	8260B	Primary
RD-20		02/14/03	314.0	Primary
RD-20		02/14/03	8260B	Primary
RD-21	Z2	02/25/03	6020	Primary
RD-21	Z2	02/25/03	7470A	Primary
RD-21	Z2	02/25/03	8260B	Primary
RD-21	Z2	02/25/03	900.0	Primary
RD-21	Z2	02/25/03	901.1	Primary
RD-21	Z2	02/25/03	906.0	Primary
RD-21	Z2	08/28/03	6020	Primary
RD-21	Z2	08/28/03	7470A	Primary
RD-21	Z2	08/28/03	8260B	Primary
RD-21	Z2	11/17/03	8260B	Primary
RD-21	Z2	11/17/03	8260B	Split
RD-21	Z2	11/17/03	8260B	Dup
RD-22	Z2	02/24/03	6020	Primary
RD-22	Z2	02/24/03	7470A	Primary
RD-22	Z2	02/24/03	8260B	Primary
RD-22	Z2	02/24/03	8260B	Split
RD-22	Z2	02/24/03	900.0	Primary
RD-22	Z2	02/24/03	901.1	Primary
RD-22	Z2	02/24/03	9014	Primary
RD-22	Z2	02/24/03	906.0	Primary
RD-22	Z2	04/30/03	8260B	Primary
RD-22	Z2	04/30/03	8260B	Dup
RD-22	Z2	06/02/03	6020-Arsenic	Primary
RD-22	Z2	08/27/03	8260B	Primary
RD-22	Z2	11/17/03	8260B	Primary
RD-23	Z1	02/26/03	6020	Primary
RD-23	Z1	02/26/03	7470A	Primary
RD-23	Z1	02/26/03	8260B	Primary
RD-23	Z1	02/26/03	900.0	Primary
RD-23	Z1	02/26/03	901.1	Primary
RD-23	Z1	02/26/03	906.0	Primary
RD-23	Z1	08/26/03	6020	Primary
RD-23	Z1	08/26/03	7470A	Primary
RD-23	Z1	08/26/03	8260B	Primary
RD-24		02/12/03	314.0	Primary
RD-24		02/12/03	8260B	Primary
RD-24		02/12/03	900.0	Primary
RD-24		02/12/03	901.1	Primary
RD-24		02/12/03	906.0	Primary
RD-24		11/14/03	900.0	Primary
RD-24		11/14/03	900.0	Split
RD-24		11/14/03	901.1	Primary
RD-24		11/14/03	901.1	Split
RD-24		11/14/03	903.1	Primary
RD-24		11/14/03	903.1	Split

See last page of Table B-II for footnotes and explanations.

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 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-24		11/14/03	904.0	Primary
RD-24		11/14/03	904.0	Split
RD-24		11/14/03	906.0	Primary
RD-24		11/14/03	906.0	Split
RD-24		11/14/03	8260B	Primary
RD-25		02/24/03	314.0	Primary
RD-25		02/24/03	8260B	Primary
RD-25		02/24/03	900.0	Primary
RD-25		02/24/03	901.1	Primary
RD-25		02/24/03	906.0	Primary
RD-25		11/13/03	8260B	Primary
RD-25		11/13/03	900.0	Primary
RD-25		11/13/03	901.1	Primary
RD-25		11/13/03	903.1	Primary
RD-25		11/13/03	904.0	Primary
RD-25		11/13/03	906.0	Primary
RD-26		05/15/03	314.0	Primary
RD-26		05/15/03	8260B	Primary
RD-26		08/21/03	8260B	Primary
RD-26		08/21/03	8260B	Dup
RD-27		02/21/03	314.0	Primary
RD-27		02/21/03	8260B	Primary
RD-27		02/21/03	906.0	Primary
RD-27		05/14/03	900.0	Primary
RD-27		05/14/03	901.1	Primary
RD-27		11/14/03	900.0	Primary
RD-27		11/14/03	900.0	Split
RD-27		11/14/03	901.1	Primary
RD-27		11/14/03	901.1	Split
RD-27		11/14/03	906.0	Primary
RD-27		11/14/03	906.0	Split
RD-27		11/14/03	8260B	Primary
RD-28		02/24/03	908.0-U	Primary
RD-28		02/24/03	314.0	Primary
RD-28		02/24/03	8260B	Primary
RD-28		02/24/03	900.0	Primary
RD-28		02/24/03	901.1	Primary
RD-28		02/24/03	906.0	Primary
RD-28		02/24/03	907.0-Th	Primary
RD-28		11/14/03	900.0	Primary
RD-28		11/14/03	901.1	Primary
RD-28		11/14/03	903.1	Primary
RD-28		11/14/03	904.0	Primary
RD-28		11/14/03	906.0	Primary
RD-28		11/14/03	8260B	Primary
RD-29		05/13/03	314.0	Primary
RD-29		05/13/03	8260B	Primary
RD-29		05/13/03	900.0	Primary

See last page of Table B-II for footnotes and explanations.

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-29		05/13/03	901.1	Primary
RD-29		05/13/03	906.0	Primary
RD-29		05/13/03	908.0-U	Primary
RD-30		02/07/03	314.0	Primary
RD-30		02/07/03	8260B	Primary
RD-30		02/07/03	900.0	Primary
RD-30		02/07/03	901.1	Primary
RD-30		02/07/03	906.0	Primary
RD-30		11/14/03	900.0	Primary
RD-30		11/14/03	901.1	Primary
RD-30		11/14/03	903.1	Primary
RD-30		11/14/03	904.0	Primary
RD-30		11/14/03	906.0	Primary
RD-30		11/14/03	8260B	Primary
RD-31	Z5	01/27/03	314.0	Primary
RD-31	Z6	01/27/03	314.0	Primary
RD-31	Z7	01/27/03	314.0	Primary
RD-31	Z7	01/27/03	8260B	Primary
RD-32		02/21/03	314.0	Primary
RD-32		02/21/03	8015	Primary
RD-32		02/21/03	8260B	Primary
RD-32		05/13/03	8260B	Primary
RD-33A	Z4	01/30/03	6020	Primary
RD-33A	Z4	01/30/03	7470A	Primary
RD-33A	Z4	01/30/03	8260B	Primary
RD-33A	Z4	01/30/03	900.0	Primary
RD-33A	Z4	01/30/03	901.1	Primary
RD-33A	Z4	01/30/03	9014	Primary
RD-33A	Z4	01/30/03	906.0	Primary
RD-33A	Z4	01/30/03	8260B	Dup
RD-33A	Z4	08/27/03	8260B	Primary
RD-33B		02/11/03	6020	Primary
RD-33B		02/11/03	7470A	Primary
RD-33B		02/11/03	8260B	Primary
RD-33B		02/11/03	900.0	Primary
RD-33B		02/11/03	901.1	Primary
RD-33B		02/11/03	9014	Primary
RD-33B		02/11/03	906.0	Primary
RD-33B		05/14/03	8260B	Primary
RD-33B		11/13/03	8260B	Primary
RD-33B		11/13/03	906.0	Primary
RD-33C		02/10/03	6020	Primary
RD-33C		02/10/03	7470A	Primary
RD-33C		02/10/03	8260B	Primary
RD-33C		02/10/03	900.0	Primary
RD-33C		02/10/03	901.1	Primary
RD-33C		02/10/03	9014	Primary
RD-33C		02/10/03	906.0	Primary

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Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-33C		05/13/03	8260B	Primary
RD-33C		11/13/03	8260B	Primary
RD-33C		11/13/03	906.0	Primary
RD-33C		11/13/03	906.0	Split
RD-34A		05/16/03	908.0-U	Primary
RD-34A		05/16/03	6020	Primary
RD-34A		05/16/03	7470A	Primary
RD-34A		05/16/03	8260B	Primary
RD-34A		05/16/03	900.0	Primary
RD-34A		05/16/03	901.1	Primary
RD-34A		05/16/03	9014	Primary
RD-34A		05/16/03	906.0	Primary
RD-34A		05/16/03	907.0-Th	Primary
RD-34B		02/06/03	6020	Primary
RD-34B		02/06/03	7470A	Primary
RD-34B		02/06/03	8260B	Primary
RD-34B		02/06/03	900.0	Primary
RD-34B		02/06/03	901.1	Primary
RD-34B		02/06/03	9014	Primary
RD-34B		02/06/03	906.0	Primary
RD-34B		11/13/03	906.0	Primary
RD-34B		11/13/03	8260B	Primary
RD-34C		02/06/03	6020	Primary
RD-34C		02/06/03	7470A	Primary
RD-34C		02/06/03	8260B	Primary
RD-34C		02/06/03	900.0	Primary
RD-34C		02/06/03	901.1	Primary
RD-34C		02/06/03	9014	Primary
RD-34C		02/06/03	906.0	Primary
RD-34C		11/13/03	906.0	Primary
RD-34C		11/13/03	8260B	Primary
RD-34C		11/13/03	8260B	Dup
RD-35A		02/14/03	8260B	Primary
RD-35B		02/19/03	8260B	Primary
RD-36B		02/12/03	314.0	Primary
RD-36B		02/12/03	8015	Primary
RD-36B		02/12/03	8260B	Primary
RD-36C		02/13/03	314.0	Primary
RD-36C		02/13/03	8015	Primary
RD-36C		02/13/03	8260B	Primary
RD-36D		02/13/03	314.0	Primary
RD-36D		02/13/03	8015	Primary
RD-36D		02/13/03	8260B	Primary
RD-37		02/14/03	314.0	Primary
RD-37		02/14/03	8015	Primary
RD-37		02/14/03	8260B	Primary
RD-37		02/17/03	8260B	Primary
RD-37		02/17/03	8260B	Split

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Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-37		05/06/03	8260B	Primary
RD-38A		02/13/03	314.0	Primary
RD-38A		02/13/03	8015	Primary
RD-38A		02/13/03	8260B	Primary
RD-38B		02/13/03	314.0	Primary
RD-38B		02/13/03	8015	Primary
RD-38B		02/13/03	8260B	Primary
RD-38B		05/02/03	8260B	Primary
RD-39B		02/13/03	314.0	Primary
RD-39B		02/13/03	8260B	Primary
RD-39B		05/01/03	8260B	Primary
RD-40		05/08/03	314.0	Primary
RD-40		05/08/03	8260B	Primary
RD-40		05/08/03	8260B	Dup
RD-41A		02/06/03	314.0	Primary
RD-41A		02/06/03	8260B	Primary
RD-41B		02/06/03	314.0	Primary
RD-41B		02/06/03	8260B	Primary
RD-41C		02/06/03	314.0	Primary
RD-41C		02/06/03	8260B	Primary
RD-41C		02/06/03	8260B	Split
RD-42		02/07/03	314.0	Primary
RD-42		02/07/03	8260B	Primary
RD-43A		02/17/03	314.0	Primary
RD-43A		02/17/03	8260B	Primary
RD-43A		05/02/03	8260B	Primary
RD-43B		02/11/03	314.0	Primary
RD-43B		02/11/03	8260B	Primary
RD-43B		05/01/03	8260B	Primary
RD-43B		08/13/03	8260B	Primary
RD-43B		08/13/03	8260B	Dup
RD-43C		02/17/03	314.0	Primary
RD-43C		02/17/03	8260B	Primary
RD-43C		05/02/03	8260B	Primary
RD-43C		08/13/03	8260B	Primary
RD-44		02/04/03	COCs	Primary
RD-44		02/04/03	314.0	Primary
RD-44		02/04/03	8260SIM	Dup
RD-44		05/06/03	314.0	Primary
RD-44		05/06/03	COCs	Primary
RD-44		08/11/03	314.0	Primary
RD-44		08/11/03	COCs	Primary
RD-45B		02/05/03	8260B	Primary
RD-45C		02/07/03	8260B	Primary
RD-46A		02/18/03	314.0	Primary
RD-46A		02/18/03	8260B	Primary
RD-46A		08/13/03	8260B	Primary
RD-46B		02/18/03	8260B	Primary

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-46B		08/13/03	8260B	Primary
RD-47		02/06/03	314.0	Primary
RD-47		02/06/03	8260B	Primary
RD-48B		02/18/03	8260B	Primary
RD-48B		02/18/03	8260B	Split
RD-48B		02/18/03	8260B	Dup
RD-48B		05/15/03	8260B	Primary
RD-48B		09/03/03	8260B	Primary
RD-48B		09/03/03	8260B	Dup
RD-48B		09/03/03	8260B	Split
RD-48B		11/20/03	8260B	Primary
RD-48C		02/18/03	8260B	Primary
RD-48C		05/13/03	8260B	Primary
RD-48C		08/20/03	8260B	Primary
RD-48C		11/21/03	8260B	Primary
RD-49A		02/04/03	COCs	Primary
RD-49A		02/04/03	314.0	Primary
RD-49A		02/04/03	8260B	Dup
RD-49A		05/07/03	314.0	Primary
RD-49A		05/07/03	COCs	Primary
RD-49A		05/07/03	8260SIM	Split
RD-49A		08/11/03	314.0	Primary
RD-49A		08/11/03	COCs	Primary
RD-49A		11/18/03	314.0	Primary
RD-49A		11/18/03	COCs	Primary
RD-49B		02/03/03	314.0	Primary
RD-49B		02/03/03	COCs	Primary
RD-49B		05/06/03	COCs	Primary
RD-49B		05/06/03	314.0	Primary
RD-49B		05/06/03	8260SIM	Split
RD-49B		08/11/03	314.0	Primary
RD-49B		08/11/03	COCs	Primary
RD-49B		11/17/03	314.0	Primary
RD-49B		11/17/03	8260SIM	Dup
RD-49B		11/17/03	8260SIM	Split
RD-49B		11/17/03	COCs	Primary
RD-49C		02/04/03	314.0	Primary
RD-49C		02/04/03	COCs	Primary
RD-49C		05/06/03	314.0	Primary
RD-49C		05/06/03	COCs	Primary
RD-49C		08/19/03	314.0	Primary
RD-49C		08/19/03	COCs	Primary
RD-49C		11/18/03	314.0	Primary
RD-49C		11/18/03	8260SIM	Dup
RD-49C		11/18/03	COCs	Primary
RD-50	Z2	02/17/03	8015	Primary
RD-50	Z2	02/17/03	8260B	Primary
RD-50	Z2	08/28/03	8260B	Primary

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Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-51B		02/12/03	314.0	Primary
RD-51B		02/12/03	8260B	Primary
RD-51B		08/21/03	8260B	Primary
RD-51B		11/06/03	314.0	Primary
RD-51B		11/06/03	314.0	Split
RD-51B		11/06/03	General Minerals	Primary
RD-51C		02/13/03	8260B	Primary
RD-51C		02/13/03	8260B	Split
RD-51C		05/08/03	8260B	Primary
RD-51C		08/19/03	8260B	Primary
RD-51C		11/07/03	314.0	Primary
RD-51C		11/07/03	314.0	Split
RD-51C		11/07/03	8260B	Primary
RD-51C		11/07/03	8260B	Split
RD-51C		11/07/03	General Minerals	Primary
RD-52B		02/11/03	314.0	Primary
RD-52B		02/11/03	8260B	Primary
RD-52B		08/14/03	8260B	Primary
RD-52B		11/18/03	314.0	Primary
RD-52B		11/18/03	General Minerals	Primary
RD-52C		02/17/03	8260B	Primary
RD-52C		05/14/03	8260B	Primary
RD-52C		05/14/03	8260B	Dup
RD-52C		08/12/03	8260B	Primary
RD-52C		11/19/03	314.0	Primary
RD-52C		11/19/03	8260B	Primary
RD-52C		11/19/03	General Minerals	Primary
RD-54A	Z2	02/18/03	6020	Primary
RD-54A	Z2	02/18/03	7470A	Primary
RD-54A	Z2	02/18/03	8260B	Primary
RD-54A	Z2	02/18/03	900.0	Primary
RD-54A	Z2	02/18/03	901.1	Primary
RD-54A	Z2	02/18/03	906.0	Primary
RD-54A	Z2	02/18/03	907.0-Th	Primary
RD-54A	Z2	02/18/03	908.0-U	Primary
RD-54A	Z2	08/26/03	6020	Primary
RD-54A	Z2	08/26/03	7470A	Primary
RD-54A	Z2	08/26/03	8260B	Primary
RD-54A	Z2	08/26/03	906.0	Primary
RD-54B		02/26/03	6020	Primary
RD-54B		02/26/03	7470A	Primary
RD-54B		02/26/03	8260B	Primary
RD-54B		02/26/03	900.0	Primary
RD-54B		02/26/03	901.1	Primary
RD-54B		02/26/03	906.0	Primary
RD-54B		08/07/03	6020	Primary
RD-54B		08/07/03	7470A	Primary
RD-54B		08/07/03	8260B	Primary

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Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-54B		08/07/03	906.0	Primary
RD-54B		08/07/03	8260B	Dup
RD-54C		02/26/03	6020	Primary
RD-54C		02/26/03	7470A	Primary
RD-54C		02/26/03	8260B	Primary
RD-54C		02/26/03	900.0	Primary
RD-54C		02/26/03	901.1	Primary
RD-54C		02/26/03	906.0	Primary
RD-54C		08/26/03	6020	Primary
RD-54C		08/26/03	7470A	Primary
RD-54C		08/26/03	8260B	Primary
RD-54C		08/26/03	906.0	Primary
RD-55A		02/13/03	314.0	Primary
RD-55A		02/13/03	8260B	Primary
RD-55A		02/13/03	8260B	Split
RD-55A		02/13/03	8260B	Dup
RD-55A		05/05/03	8260B	Primary
RD-55A		05/05/03	8260B	Dup
RD-55A		08/18/03	8260B	Primary
RD-55A		08/18/03	8260B	Split
RD-55A		08/18/03	8260B	Dup
RD-55B		02/19/03	314.0	Primary
RD-55B		02/19/03	8260B	Primary
RD-55B		05/06/03	8260B	Primary
RD-55B		05/06/03	8260B	Dup
RD-55B		08/22/03	8260B	Primary
RD-55B		08/22/03	8260B	Split
RD-55B		08/22/03	8260B	Dup
RD-56A		02/24/03	8260B	Primary
RD-56B		02/19/03	8260B	Primary
RD-56B		08/12/03	6020	Primary
RD-56B		08/12/03	7470A	Primary
RD-56B		08/12/03	8260B	Primary
RD-56B		11/11/03	8260B	Primary
RD-56B		11/11/03	8260B	Dup
RD-56B		11/11/03	8260B	Split
RD-57	Z8	01/29/03	6020	Primary
RD-57	Z8	01/29/03	7470A	Primary
RD-57	Z8	01/29/03	8260B	Primary
RD-57	Z8	01/29/03	900.0	Primary
RD-57	Z8	01/29/03	901.1	Primary
RD-57	Z8	01/29/03	906.0	Primary
RD-57	Z8	04/30/03	6020	Primary
RD-57	Z8	04/30/03	7470A	Primary
RD-57	Z8	04/30/03	8260B	Primary
RD-57	Z8	04/30/03	900.0	Primary
RD-57	Z8	04/30/03	901.1	Primary
RD-57	Z8	04/30/03	906.0	Primary

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Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-57	Z8	08/27/03	8260B	Primary
RD-57	Z8	08/27/03	906.0	Primary
RD-57	Z8	11/18/03	8260B	Primary
RD-58A		02/03/03	8260B	Primary
RD-58A		12/09/03	8260B	Primary
RD-58B		01/31/03	8260B	Primary
RD-58B		05/05/03	8260B	Primary
RD-58B		08/19/03	8260B	Primary
RD-58B		11/19/03	8260B	Primary
RD-58C		02/03/03	8260B	Primary
RD-58C		08/18/03	8260B	Primary
RD-59A		01/31/03	314.0	Primary
RD-59A		01/31/03	6020	Primary
RD-59A		01/31/03	7470A	Primary
RD-59A		01/31/03	8260B	Primary
RD-59A		01/31/03	900.0	Primary
RD-59A		01/31/03	901.1	Primary
RD-59A		01/31/03	906.0	Primary
RD-59A		05/15/03	314.0	Primary
RD-59A		05/15/03	8260B	Primary
RD-59A		05/15/03	900.0	Primary
RD-59A		05/15/03	900.0	Split
RD-59A		05/15/03	901.1	Primary
RD-59A		05/15/03	901.1	Split
RD-59A		05/15/03	906.0	Primary
RD-59A		05/15/03	906.0	Split
RD-59A		08/08/03	906.0	Split
RD-59A		08/08/03	314.0	Primary
RD-59A		08/08/03	6020	Primary
RD-59A		08/08/03	7470A	Primary
RD-59A		08/08/03	8260B	Primary
RD-59A		08/08/03	906.0	Primary
RD-59A		11/14/03	906.0	Primary
RD-59A		11/14/03	906.0	Split
RD-59A		11/14/03	314.0	Primary
RD-59A		11/14/03	8260B	Primary
RD-59A		11/14/03	General Minerals	Primary
RD-59B		01/31/03	314.0	Primary
RD-59B		01/31/03	6020	Primary
RD-59B		01/31/03	7470A	Primary
RD-59B		01/31/03	8260B	Primary
RD-59B		01/31/03	900.0	Primary
RD-59B		01/31/03	901.1	Primary
RD-59B		01/31/03	906.0	Primary
RD-59B		05/15/03	8260B	Primary
RD-59B		08/08/03	314.0	Primary
RD-59B		08/08/03	6020	Primary
RD-59B		08/08/03	7470A	Primary

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Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-59B		08/08/03	8260B	Primary
RD-59B		08/08/03	906.0	Primary
RD-59B		12/04/03	314.0	Primary
RD-59B		12/04/03	8260B	Primary
RD-59B		12/04/03	General Minerals	Primary
RD-59C		01/31/03	314.0	Primary
RD-59C		01/31/03	6020	Primary
RD-59C		01/31/03	7470A	Primary
RD-59C		01/31/03	8260B	Primary
RD-59C		01/31/03	900.0	Primary
RD-59C		01/31/03	901.1	Primary
RD-59C		01/31/03	906.0	Primary
RD-59C		05/15/03	8260B	Primary
RD-59C		08/08/03	314.0	Primary
RD-59C		08/08/03	6020	Primary
RD-59C		08/08/03	7470A	Primary
RD-59C		08/08/03	8260B	Primary
RD-59C		08/08/03	906.0	Primary
RD-59C		12/04/03	314.0	Primary
RD-59C		12/04/03	8260B	Primary
RD-59C		12/04/03	General Minerals	Primary
RD-60		05/15/03	8260B	Primary
RD-60		08/26/03	8260B	Primary
RD-61		02/14/03	8260B	Primary
RD-61		05/08/03	8260B	Primary
RD-61		08/26/03	8260B	Primary
RD-61		12/03/03	8260B	Split
RD-61		12/03/03	8260B	Primary
RD-61		12/03/03	8260B	Dup
RD-62		02/10/03	8260B	Primary
RD-62		05/02/03	8260B	Primary
RD-62		11/21/03	8260B	Primary
RD-63		02/05/03	8260B	Primary
RD-63		02/05/03	900.0	Primary
RD-63		02/05/03	901.1	Primary
RD-63		02/05/03	906.0	Primary
RD-63		08/26/03	8260B	Primary
RD-64	Z6	01/29/03	8260B	Primary
RD-64	Z6	01/29/03	900.0	Primary
RD-64	Z6	01/29/03	901.1	Primary
RD-64	Z6	01/29/03	906.0	Primary
RD-64	Z6	01/29/03	908.0-U	Primary
RD-65	Z4	01/28/03	8260B	Primary
RD-66		02/10/03	314.0	Primary
RD-66		02/10/03	8260B	Primary
RD-66		05/08/03	8260B	Primary
RD-66		05/08/03	8260B	Dup
RD-67		02/19/03	8260B	Primary

See last page of Table B-II for footnotes and explanations.

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SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
RD-67		08/21/03	8260B	Primary
RD-68A		02/04/03	314.0	Primary
RD-68A		02/04/03	8260B	Primary
RD-68A		05/15/03	8260B	Primary
RD-68A		08/07/03	8260B	Primary
RD-68A		12/04/03	314.0	Primary
RD-68A		12/04/03	8260B	Primary
RD-68A		12/04/03	General Minerals	Primary
RD-68B		02/04/03	314.0	Primary
RD-68B		02/04/03	8260B	Primary
RD-68B		05/15/03	8260B	Primary
RD-68B		08/07/03	8260B	Primary
RD-68B		12/04/03	8260B	Split
RD-68B		12/04/03	314.0	Primary
RD-68B		12/04/03	8260B	Primary
RD-68B		12/04/03	General Minerals	Primary
RD-69		02/11/03	8260B	Primary
RD-69		08/26/03	8260B	Primary
RD-70		02/05/03	8260B	Primary
RD-70		05/01/03	8260B	Primary
RD-71		02/10/03	314.0	Primary
RD-71		02/10/03	8260B	Primary
RD-71		05/08/03	8260B	Primary
RD-72	Z7	01/27/03	8260B	Primary
RD-73	Z9	01/27/03	8260B	Primary
HAR-01		01/27/03	314.0	Primary
HAR-05		02/21/03	314.0	Primary
HAR-06		02/21/03	314.0	Primary
HAR-06		02/21/03	8260B	Primary
HAR-07		04/16/03	App IX	Primary
HAR-07		04/16/03	1625M	Dup
HAR-07		04/16/03	1625M	Split
HAR-07		04/16/03	314.0	Primary
HAR-07		04/16/03	8260SIM	Split
HAR-07		11/21/03	8260B	Primary
HAR-16	Comp	04/17/03	App IX (only 8260B, CN, Sulfide, 8270, 504.1, 1625M)	Primary
HAR-17		04/16/03	App IX	Primary
HAR-17		04/16/03	314.0	Primary
HAR-17		04/16/03	8260B	Dup
HAR-17		11/21/03	8260B	Primary
HAR-18		02/25/03	8260B	Primary
HAR-18		05/16/03	314.0	Primary
HAR-18		08/26/03	8260B	Primary
HAR-21		02/27/03	314.0	Primary
HAR-21		02/27/03	8260B	Primary
HAR-22		02/26/03	314.0	Primary
HAR-22		02/26/03	8260B	Primary

See last page of Table B-II for footnotes and explanations.

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SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
HAR-22		08/21/03	8260B	Primary
HAR-23		02/27/03	314.0	Primary
HAR-23		02/27/03	8260B	Primary
HAR-23		08/26/03	8260B	Primary
HAR-25		02/27/03	314.0	Primary
HAR-25		02/27/03	8260B	Primary
HAR-26		02/26/03	8260B	Primary
HAR-26		05/15/03	314.0	Primary
HAR-26		05/15/03	8260B	Primary
HAR-26		05/15/03	8260B	Dup
HAR-26		08/26/03	8260B	Primary
WS-04A		02/19/03	8260B	Primary
WS-04A		02/19/03	8260B	Split
WS-04A		02/19/03	8260B	Dup
WS-04A		05/09/03	8260B	Primary
WS-04A		05/09/03	8260B	Dup
WS-04A		12/03/03	8260B	Split
WS-04A		12/03/03	314.0	Primary
WS-04A		12/03/03	8260B	Primary
WS-04A		12/03/03	General Minerals	Primary
WS-04A		12/03/03	8260B	Dup
WS-05		02/04/03	314.0	Primary
WS-05		02/04/03	COCs	Primary
WS-05		05/05/03	COCs	Primary
WS-05		05/05/03	314.0	Primary
WS-05		05/05/03	8260SIM	Split
WS-06		02/03/03	314.0	Primary
WS-06		02/03/03	COCs	Primary
WS-06		05/07/03	314.0	Primary
WS-06		05/07/03	COCs	Primary
WS-06		08/19/03	314.0	Primary
WS-06		08/19/03	COCs	Primary
WS-06		11/19/03	314.0	Primary
WS-06		11/19/03	COCs	Primary
WS-09		02/03/03	314.0	Primary
WS-09		02/03/03	COCs	Primary
WS-09		05/07/03	314.0	Primary
WS-09		05/07/03	COCs	Primary
WS-09A		02/12/03	8260B	Primary
WS-09A		05/01/03	8260B	Primary
WS-09A		08/26/03	8260B	Primary
WS-09A		12/03/03	8260B	Split
WS-09A		12/03/03	8260B	Primary
WS-09A		12/03/03	8260B	Dup
WS-09B		11/06/03	314.0	Primary
WS-09B		11/06/03	General Minerals	Primary
WS-12		08/13/03	314.0	Primary
WS-12		08/13/03	COCs	Primary

See last page of Table B-II for footnotes and explanations.

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SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
WS-13		08/20/03	314.0	Primary
WS-13		08/20/03	COCs	Primary
OS-02		01/31/03	314.0	Primary
OS-02		01/31/03	8260B	Primary
OS-02		12/09/03	314.0	Primary
OS-02		12/09/03	General Minerals	Primary
OS-03		01/31/03	314.0	Primary
OS-03		12/09/03	314.0	Primary
OS-03		12/09/03	General Minerals	Primary
OS-04		08/08/03	314.0	Primary
OS-04		08/08/03	8260B	Primary
OS-04		12/09/03	314.0	Primary
OS-04		12/09/03	General Minerals	Primary
OS-05		01/31/03	314.0	Primary
OS-05		12/09/03	314.0	Primary
OS-05		12/09/03	General Minerals	Primary
OS-08		01/31/03	314.0	Primary
OS-08		01/31/03	8260B	Primary
OS-08		12/09/03	314.0	Primary
OS-08		12/09/03	314.0	Split
OS-08		12/09/03	General Minerals	Primary
OS-09		07/02/03	314.0	Primary
OS-09		07/02/03	314.0	Split
OS-09		07/02/03	Deuterium	Primary
OS-09		07/02/03	General Minerals	Primary
OS-09		07/02/03	Oxygen-18	Primary
OS-09		07/10/03	314.0	Primary
OS-09		07/10/03	314.0	Split
OS-09		07/10/03	General Minerals	Primary
OS-09		07/10/03	314.0	Dup
OS-09		07/10/03	314.0	Split Sample Dup
OS-09		07/17/03	314.0	Primary
OS-09		07/17/03	314.0	Split
OS-09		07/17/03	Deuterium	Primary
OS-09		07/17/03	General Minerals	Primary
OS-09		07/17/03	Oxygen-18	Primary
OS-09		07/17/03	314.0	Dup
OS-09		07/24/03	314.0	Primary
OS-09		07/24/03	314.0	Split
OS-09		07/24/03	General Minerals	Primary
OS-09		07/24/03	314.0	Dup
OS-09		07/24/03	314.0	Split Sample Dup
OS-09		07/31/03	314.0	Primary
OS-09		07/31/03	314.0	Split - AMA
OS-09		07/31/03	General Minerals	Primary
OS-09		07/31/03	314.0	Dup
OS-09		07/31/03	314.0	Split - Ceimic
OS-09		07/31/03	314.0	Split Sample Dup - AMA

See last page of Table B-II for footnotes and explanations.

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SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
OS-09		07/31/03	314.0	Split Sample Dup - Ceimic
OS-09		08/07/03	314.0	Primary
OS-09		08/07/03	314.0	Split
OS-09		08/07/03	General Minerals	Primary
OS-09		08/07/03	314.0	Dup
OS-09		08/07/03	314.0	Split Sample Dup
OS-09		08/12/03	314.0	Primary
OS-09		08/12/03	General Minerals	Primary
OS-09		08/12/03	314.0	Dup
OS-09		08/12/03	314.0	Split
OS-09		08/12/03	314.0	Split Sample Dup
OS-09		08/21/03	314.0	Primary
OS-09		08/21/03	314.0	Split
OS-09		08/21/03	General Minerals	Primary
OS-09		08/21/03	314.0	Dup
OS-09		08/21/03	314.0	Split Sample Dup
OS-09		08/28/03	314.0	Primary
OS-09		08/28/03	Deuterium	Primary
OS-09		08/28/03	General Minerals	Primary
OS-09		08/28/03	Oxygen-18	Primary
OS-09		08/28/03	314.0	Split
OS-09		08/28/03	314.0	Dup
OS-09		08/28/03	314.0	Split Sample Dup
OS-09		09/04/03	314.0	Primary
OS-09		09/04/03	314.0	Split
OS-09		09/04/03	General Minerals	Primary
OS-09		09/04/03	314.0	Dup
OS-09		09/04/03	314.0	Split Sample Dup
OS-09		09/11/03	314.0	Primary
OS-09		09/11/03	314.0	Split
OS-09		09/11/03	General Minerals	Primary
OS-09		09/11/03	314.0	Dup
OS-09		09/11/03	314.0	Split Sample Dup
OS-09		09/18/03	314.0	Primary
OS-09		09/18/03	314.0	Split
OS-09		09/18/03	General Minerals	Primary
OS-09		09/18/03	314.0	Dup
OS-09		09/18/03	314.0	Split Sample Dup
OS-09		09/25/03	314.0	Primary
OS-09		09/25/03	314.0	Split
OS-09		09/25/03	Deuterium	Primary
OS-09		09/25/03	General Minerals	Primary
OS-09		09/25/03	Oxygen-18	Primary
OS-09		09/25/03	314.0	Dup
OS-09		09/25/03	314.0	Split Sample Dup
OS-09		10/02/03	314.0	Primary
OS-09		10/02/03	314.0	Split
OS-09		10/02/03	General Minerals	Primary

See last page of Table B-II for footnotes and explanations.

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SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
 QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
OS-09		10/02/03	314.0	Dup
OS-09		10/02/03	314.0	Split Sample Dup
OS-09		11/06/03	314.0	Primary
OS-09		11/06/03	314.0	Split
OS-09		11/06/03	8260B	Primary
OS-09		11/06/03	8260B	Split
OS-09		11/06/03	General Minerals	Primary
OS-09		11/06/03	314.0	Dup
OS-09		11/06/03	314.0	Split Sample Dup
OS-09		11/06/03	8260B	Dup
OS-09		11/13/03	314.0	Primary
OS-09		11/13/03	314.0	Split
OS-09		11/13/03	General Minerals	Primary
OS-09		11/13/03	314.0	Dup
OS-09		11/13/03	314.0	Split Sample Dup
OS-09		11/20/03	314.0	Primary
OS-09		11/20/03	General Minerals	Primary
OS-09		11/24/03	314.0	Primary
OS-09		11/24/03	General Minerals	Primary
OS-09		12/04/03	314.0	Primary
OS-09		12/04/03	314.0	Split
OS-09		12/04/03	Deuterium	Primary
OS-09		12/04/03	General Minerals	Primary
OS-09		12/04/03	Oxygen-18	Primary
OS-09		12/11/03	314.0	Primary
OS-09		12/11/03	General Minerals	Primary
OS-09		12/18/03	314.0	Primary
OS-09		12/18/03	General Minerals	Primary
OS-09		12/23/03	314.0	Primary
OS-09		12/23/03	General Minerals	Primary
OS-09		12/30/03	314.0	Primary
OS-09		12/30/03	General Minerals	Primary
OS-10		01/31/03	314.0	Primary
OS-10		12/09/03	314.0	Primary
OS-10		12/09/03	314.0	Split
OS-10		12/09/03	General Minerals	Primary
OS-16		01/30/03	314.0	Primary
OS-16		01/30/03	8260B	Primary
OS-17		02/25/03	314.0	Primary
OS-17		02/25/03	8260B	Primary
OS-21		09/03/03	314.0	Primary
OS-21		09/03/03	8260B	Primary
OS-21		12/02/03	314.0	Primary
OS-21		12/02/03	314.0	Split
OS-21		12/02/03	General Minerals	Primary
OS-24	Z15	01/28/03	8260B	Primary
OS-26		02/04/03	314.0	Primary
OS-26		02/04/03	8260B	Primary

See last page of Table B-II for footnotes and explanations.

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SUMMARY OF SAMPLING AND ANALYSES FOR WELLS AND SPRINGS
QUARTERLY GROUNDWATER MONITORING PROGRAM, 2003
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Port Number	Date Sampled	Analysis	Sample Type
OS-26		02/04/03	8260B	Dup
OS-26		12/02/03	314.0	Primary
OS-26		12/02/03	8260B	Primary
OS-26		12/02/03	General Minerals	Primary
OS-28		08/22/03	1625M	Primary
OS-28		08/22/03	1625M	Dup
OS-28		08/22/03	314.0	Primary
OS-28		08/22/03	7470A	Primary
OS-28		08/22/03	8260B	Primary
OS-28		08/22/03	8260B	Dup
OS-28		08/22/03	8260SIM	Primary
OS-28		08/22/03	8260SIM	Dup
OS-28		08/22/03	8270C	Primary
OS-28		08/22/03	General Minerals	Primary
OS-28		08/22/03	General Minerals	Dup
OS-28		09/18/03	8270C	Primary
OS-28		09/18/03	1625M	Primary
OS-28		09/18/03	314.0	Primary
OS-28		09/18/03	8260B	Primary
OS-28		09/18/03	1625M	Dup
OS-28		12/16/03	1625M	Primary
OS-28		12/16/03	1625M	Dup
OS-28		12/16/03	1625M	Split

See last page of Table B-II for footnotes and explanations.

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AMA	= American Analytics of Chatsworth, California.
Ceimic	= Ceimic Corporation of Narragansett, R.I.
Primary	= Primary sample.
Dup	= Sample duplicate.
Split	= Sample split.
Split Sample Dup	= Sample duplicate analyzed by the split laboratory.
Comp	= Sample composite from FLUTe ports. RD-10 samples were composited from FLUTe ports 3, 6, and 9. HAR-16 samples were composited from FLUTe ports 7 through 12.
Z	= FLUTe sample port number.

ANALYTICAL METHODS

314.0	= Perchlorate, EPA method 314.0.
1625M	= N-Nitrosodimethylamine, modified EPA method 1625.
6020	= Trace metals, including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc using EPA method 6020.
7470A	= Mercury, EPA method 7470A.
8015	= EPA method 8015 modified for fuel hydrocarbons.
8260B	= EPA method 8260 for volatile organic compounds (most recent version).
8260SIM	= 1,4-Dioxane, EPA method 8260SIM.
8270C	= EPA method 8270C for base/neutral and acid organic compounds.
9014	= Cyanide, EPA method 9014.
App IX	= Appendix IX, see below.
COCs	= Constituents of concern (table 3 of post-closure permits plus 1,3-dinitrobenzene). Includes EPA methods 8260B, 8260SIM, 8270, 1625M, 8315 for formaldehyde, 300.0 for nitrate and fluoride, and 350.3 for ammonia.
Deuterium	= Mass spectrometry of stable isotope deuterium.
General minerals	= General minerals, including calcium, magnesium, potassium, sodium, bicarbonate, carbonate, chloride, nitrate, sulfate, TDS, iron, pH, and specific conductance. Includes EPA methods 6010B, 300.0, 160.1, 150.1, 120.1 and method SM2320B.
Oxygen-18	= Mass spectrometry of stable isotope oxygen-18.

APPENDIX IX CONSTITUENTS

The laboratory uses the most current methods which may be updated from methods listed in Appendix IX (Code of Federal Regulations, Title 40, Part 264, Appendix IX, Ground-water Monitoring List).

APPENDIX IX analyses include:

EPA method 8260 for volatile organic compounds
EPA method 8270 for base/neutral and acid organic compounds
EPA method 8081 for organochlorine pesticides
EPA method 8082 for polychlorinated biphenyls (PCBs)
EPA method 8141 for organophosphorous pesticides
EPA method 8151 for chlorinated herbicides
EPA method 6010/6020 for metals (Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Ni, Se, Ag, Tl, Sn, V, Zn)

TABLE B-II
FOOTNOTES AND EXPLANATIONS

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EPA method 504.1 for 1,2,3-trichloropropane, 1,2-dibromoethane, 1,2-dibromo-3-chloropropane
EPA method 7470 for mercury
EPA method 9014 for total cyanide
EPA method 376.2 for sulfide
Modified EPA method 8270 for pentachlorophenol
Modified EPA method 1625 for N-nitrosodimethylamine
EPA method 8290 for dioxins and furans

Radiochemical Parameters

900.0	=	EPA method 900.0 for gross alpha and beta radioactivity
901.1	=	EPA method 901.1 for gamma-emitting radionuclides
903.1	=	EPA method 903.1 for Ra-226
904.0	=	EPA method 904.0 for Ra-228
905.0	=	EPA method 905.0 for Sr-90
906.0	=	EPA method 906.0 for tritium
907.0-Th	=	EPA method 907.0 for isotopic thorium
908.0-U	=	EPA method 908.0 for isotopic uranium

Note: An equivalent or superior in-house laboratory procedure is considered acceptable for EPA methodology. Lab used the most current promulgated version of each EPA method.

Select radiochemistry analyses were performed per EPA drinking water regulations beginning in the third quarter 2003:

- 1) if gross alpha activity exceeded 5 pCi/l, then Ra-226 and Ra-228 were analyzed by EPA methods 903.1 and 904.0, respectively;
- 2) if gross alpha activity exceeded 15 pCi/l, then isotopic uranium was analyzed by EPA method 908.0;
- 3) if gross beta activity exceeded 50 pCi/l, then K-40 and Sr-90 were analyzed by EPA methods 901.1 and 905.0, respectively.

TABLE B-III
2004 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

ANALYTICAL METHODS							
Well ID	Area	Sponsor	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Existing Sampling Plan
SHALLOW SH WELLS							
SH-1	III	R					
SH-2	III	R					
SH-3	III	R	8260		8260		Evaluation monitoring
SH-4	III	R		App IX		8260	Point of compliance
SH-5	III	R					
SH-6	III	R					
SH-7	III	R					
SH-8	III	R					
SH-9	III	R					
SH-10	III	R					
SH-11	III	R	8260 Perchlorate		8260		Evaluation monitoring
ECL French- drain	III	R	8260		8260		Interim corrective action
SHALLOW RS WELLS							
RS-1	I	N	8260 8015 Perchlorate		8260 8015		Evaluation monitoring B/351
			Perchlorate				
RS-2	I	N					
RS-3	I	R					
RS-4	I	N					
RS-5	I	N					
RS-6	I	R	Perchlorate				
RS-7	I	N	8260		8260		Evaluation monitoring
RS-8	II	N		App IX		8260	Point of compliance
RS-9	III	R					
RS-10	II	N	8260 Perchlorate		8260		Evaluation monitoring
RS-11	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260		Evaluation monitoring
RS-12	III	R					
RS-13	II	N	8260 Perchlorate		8260		Evaluation monitoring
RS-14	III	R					
RS-15	III	N					
RS-16	IV	D	8260 Perchlorate 900.0 906.0				B/056 landfill
RS-17	III	R					
RS-18	IV	D	8260 Perchlorate 900.0 901.1 906.0 TM U, Th		8260 900.0 901.1 906.0 U,Th		FSDf
RS-19	I	N	8260 Perchlorate		8260		Evaluation monitoring

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TABLE B-III
2004 ANNUAL MONITORING SCHEDULE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RS-20	I	R					
RS-21	II	R	8260		8260		Evaluation monitoring
RS-22	II	R					
RS-23	IV	D	8260 8015 Perchlorate 900.0 901.1 906.0 U				
RS-24	IV	D	Perchlorate 900.0 901.1 906.0 U				
RS-25	IV	D	Perchlorate 900.0 901.1 906.0 U				
RS-27	IV	D	Perchlorate				
RS-28	IV	D	8260 Perchlorate 900.0 901.1 906.0				RMHF
RS-29	II	R					
RS-30	I	R	8260 8015 Perchlorate		8260 8015		B/351
RS-31	I	R	8260 8015		8260 8015		B/351
RS-32	I	R	8260 8015		8260 8015		B/351
RS-54	IV	D	8260 TM Perchlorate 900.0 901.1 906.0, U, Th		8260 TM Perchlorate 900.0 901.1 906.0, U, Th		FSDf
SHALLOW ES WELLS							
ES-1	I	R	8260		8260		Interim corrective action
ES-2	I	R	8260 Perchlorate				
ES-3	I	R	8260		8260		Interim corrective action
ES-4	I	R	8260		8260		Interim corrective action
ES-5	I	R	8260		8260		Interim corrective action
ES-6	I	R	8260		8260		Interim corrective action
ES-7	I	R	8260		8260		Interim corrective action
ES-8	I	R					
ES-9	I	R	8260 Perchlorate				
ES-10	I	R	8260 Perchlorate				

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Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
ES-11	I	R	8260		8260		Interim corrective action
ES-12	I	R	8260 Perchlorate				
ES-13	I	R					
ES-14	III	R	8260		8260		Interim corrective action
ES-15	III	R					
ES-16	III	R					
ES-17	III	R	8260		8260		Interim corrective action
ES-18	II	R					
ES-19	II	R					
ES-20	II	R					
ES-21	II	R	8260		8260		Interim corrective action
ES-22	II	R	8260		8260		Interim corrective action
ES-23	III	R	8260		8260		Interim corrective action
ES-24	III	R	8260 Perchlorate		8260		Interim corrective action
ES-25	III	R					
ES-26	III	R	8260		8260		Interim corrective action
ES-27	III	R	8260		8260		Interim corrective action
ES-28	III	R					
ES-29	III	R					
ES-30	III	R	8260		8260		Interim corrective action
ES-31	IV	D	8260 Perchlorate 900.0 901.1 906.0				
ES-32	III	R	8260		8260		Interim corrective action
SHALLOW HAR WELLS							
HAR-2	I	R					
HAR-3	I	R	8260		8260		Evaluation monitoring
HAR-4	I	R	8260		8260		Interim corrective action
HAR-9	II	N					
HAR-11	II	N	8260 8015		8260		Evaluation monitoring
HAR-12	III	N					
HAR-13	II	N					
HAR-14	II	N		App IX		8260	Point of compliance
HAR-15	II	N		App IX		8260	Point of compliance
HAR-27	II	N	8260		8260		Evaluation monitoring
HAR-28	II	N					
HAR-29	II	R					
HAR-30	II	N					
HAR-31	II	N					
HAR-32	III	R					
HAR-33	III	R					
HAR-34	III	R					
CHATSWORTH FORMATION RD WELLS							
RD-1	I	R	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Interim corrective action CFOU investigation
RD-2	I	R	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Interim corrective action CFOU investigation
RD-3	I	N	8260		8260		Evaluation monitoring

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-4	II	R	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Interim corrective action CFOU investigation
RD-5A	UL, S of Area II	N	8260		8260		Evaluation monitoring
RD-5B	UL, S of Area II	N	8260	8260	8260	8260	Detection monitoring
RD-5C	UL, S of Area II	N	8260	8260	8260	8260	Detection monitoring
RD-6	UL, S of Area II	N	8260	8260	8260	8260	Background
RD-7	IV	D	8260 900.0 901.1 906.0, U, Th		8260 900.0 906.0		B/056 landfill FLUTE sampling system
RD-8	III	R					
RD-9	II	R	8260		8260		Interim corrective action
RD-10	I	N	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Evaluation monitoring FLUTE sampling system CFOU investigation
RD-11	III	R					
RD-12	III	R					
RD-13	IV	D	8260	8260	8260	8260	Background
RD-14	IV	D	8260 Perchlorate				
RD-15	IV	D	8260 TM Perchlorate 900.0 901.1 906.0 U				
RD-16	IV	D	8260	8260	8260	8260	Detection monitoring
RD-17	IV	D	8260 Perchlorate 900.0 901.1 906.0				RMHF
RD-18	IV	D	8260 Perchlorate	8260	8260	8260	Perimeter well
RD-19	IV	D	8260 Perchlorate	8260	8260	8260	Perimeter well
RD-20	IV	D	8260 Perchlorate				
RD-21	IV	D	8260 TM 900.0 901.1 906.0		8260 TM		FSDf FLUTE sampling system
RD-22	IV	D	8260, TM, CN 900.0 901.1 906.0	8260	8260	8260	FSDf Perimeter well

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-23	IV	D	8260 TM 900.0 901.1 906.0		8260 TM		FSDf FLUTe sampling system
RD-24	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		B/059
RD-25	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		B/059
RD-26	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-27	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		RMHF
RD-28	IV	D	8260 Perchlorate 900.0 901.1 906.0, U, Th		8260 900.0 901.1 906.0		B/059
RD-29	IV	D	8260 Perchlorate 900.0 901.1 906.0 U				
RD-30	IV	D	8260 Perchlorate 900.0 901.1 906.0		8260 900.0 901.1 906.0		RMHF
RD-31	I	N	8260 Perchlorate				FLUTe sampling system
RD-32	Off-site, NE of	N	8260 8015	8260	8260 8015	8260	Detection monitoring B/351
RD-33A	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0		8260		FSDf FLUTe sampling system
RD-33B	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0	8260	8260 906.0	8260	FSDf Perimeter well

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-33C	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0	8260	8260 906.0	8260	FSDP Perimeter well
RD-34A	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0, U, Th		8260 906.0		RMHF
RD-34B	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0		8260 906.0		RMHF
RD-34C	UL, NW of Area IV	D	8260 TM CN 900.0 901.1 906.0		8260 906.0		RMHF
RD-35A	I	N	8260				
RD-35B	I	N	8260				
RD-36A	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-36B	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-36C	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-36D	Off-site, NE of Area I	N	8260 8015		8260 8015		B/351
RD-37	Off-site, NE of Area I	N	8260 8015	8260	8260 8015	8260	Detection monitoring B/351
RD-38A	Off-site, NE of Area I	N	8260 8015		8260 8015		Evaluation monitoring B/351
RD-38B	Off-site, NE of Area I	N	8260 8015	8260	8260 8015	8260	B/351
RD-39A	Off-site, NE of Area I	N	8260	8260	8260	8260	Detection monitoring
RD-39B	Off-site, NE of Area I	N	8260	8260	8260	8260	Perimeter well
RD-40	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-41A	II	N	8260 Perchlorate				
RD-41B	II	N	8260 Perchlorate				
RD-41C	II	N	8260 Perchlorate				
RD-42	II	N	8260 Perchlorate				

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-43A	Off-site, Near Area I	N	8260 Perchlorate	8260	8260	8260	Detection monitoring
RD-43B	Off-site, Near Area I	N	8260 Perchlorate	8260	8260	8260	Detection monitoring
RD-43C	Off-site, Near Area I	N	8260 Perchlorate	8260	8260	8260	Detection monitoring
RD-44	I	N	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Detection monitoring CFOU investigation
RD-45A	I	N	8260		8260		Evaluation monitoring
RD-45B	I	N	8260		8260		Evaluation monitoring
RD-45C	I	N	8260		8260		Evaluation monitoring
RD-46A	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-46B	I	N	8260		8260		
RD-47	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-48A	UL, SW of Area I	N	8260	8260	8260	8260	Background
RD-48B	UL, SW of Area I	N	8260	8260	8260	8260	Background
RD-48C	UL, SW of Area I	N	8260	8260	8260	8260	Background
RD-49A	II	N	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	CFOU investigation
RD-49B	II	N	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	CFOU investigation
RD-49C	II	N	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	CFOU investigation
RD-50	IV	D	8260 8015		8260		Perimeter well FLUTE sampling system
RD-51A	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-51B	II	N	8260 Perchlorate		8260		Evaluation monitoring
RD-51C	II	N	8260	8260	8260	8260	Detection monitoring
RD-52A	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-52B	I	N	8260 Perchlorate		8260		Evaluation monitoring
RD-52C	I	N	8260	8260	8260	8260	Detection monitoring
RD-53	I	N	8260 8015 Perchlorate		8260 8015		B/351 FLUTE sampling system
RD-54A	IV	D	8260 TM 900.0 901.1 906.0, U, Th		8260 TM 906.0		FSDf FLUTE sampling system
RD-54B	IV	D	8260 TM 900.0 901.1 906.0		8260 TM 906.0		FSDf

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-54C	IV	D	8260 TM 900.0 901.1 906.0		8260 TM 906.0		FSDF
RD-55A	III	N	8260 Perchlorate		8260		Evaluation monitoring
RD-55B	III	N	8260 Perchlorate		8260		Evaluation monitoring
RD-56A	UL, N of Area III	N	8260				
RD-56B	UL, N of Area III	N	8260	8260	8260 TM	8260	Perimeter well
RD-57	UL, NW of Area IV	D	8260 TM 900.0 901.1 906.0	8260	8260 906.0	8260	FSDF Perimeter well FLUTE sampling system
RD-58A	III	N	8260		8260		Evaluation monitoring
RD-58B	III	N	8260	8260	8260	8260	Detection monitoring
RD-58C	III	N	8260		8260		Evaluation monitoring
RD-59A	Off- site, W of Area IV	D	8260 TM Perchlorate 900.0 901.1 906.0	8260	8260 TM Perchlorate 906.0	8260	FSDF & RMHF Perimeter well
RD-59B	Off- site, W of Area IV	D	8260 TM Perchlorate 900.0 901.1 906.0	8260	8260 TM Perchlorate 906.0	8260	FSDF & RMHF Perimeter well
RD-59C	Off- site, W of Area IV	D	8260 TM Perchlorate 900.0 901.1 906.0	8260	8260 TM Perchlorate 906.0	8260	FSDF & RMHF Perimeter well
RD-60	III	N	8260		8260		Evaluation monitoring
RD-61	I	N	8260	8260	8260	8260	Detection monitoring
RD-62	UL, S of Area I	N	8260	8260	8260	8260	Detection monitoring
RD-63	IV	D	8260 900.0 901.1 906.0		8260		RMHF Area IV extraction
RD-64	IV	D	8260 900.0 901.1 906.0 U				FSDF FLUTE sampling system
RD-65	IV	D	8260				FSDF FLUTE sampling system

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
RD-66	Off-site, NE of Area I	N	8260	8260	8260	8260	Perimeter well
RD-67	UL, S of Area IV	N	8260		8260		Perimeter well
RD-68A	Off-site, N of Area III	N	8260	8260	8260	8260	Perimeter well
RD-68B	Off-site, N of Area III	N	8260	8260	8260	8260	Perimeter well
RD-69	I	N	8260		8260		Perimeter well
RD-70	UL, N of Area II	N	8260	8260	8260	8260	Perimeter well
RD-71	Off-site, NE of Area I	N	8260	8260	8260	8260	Perimeter well
RD-72	I	N	8260				FLUTe sampling system
RD-73	I	R	8260 8015 Perchlorate				UT 37 FLUTe sampling system
RD-74	IV	D	8260	8260	8260	8260	B/056
CHATSWORTH FORMATION HAR WELLS							
HAR-1	I	R	Perchlorate				FLUTe sampling system
HAR-5	II	R	Perchlorate				
HAR-6	II	N	8260 Perchlorate				
HAR-7	II	R		App IX		8260	Point of compliance
HAR-8	II	N					
HAR-16	I	R		App IX		8260	Point of compliance FLUTe sampling system
HAR-17	II	R		App IX		8260	Point of compliance
HAR-18	III	R	8260		8260		Interim corrective action
HAR-19	II	R	8260				
HAR-20	II	N	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	CFOU investigation
HAR-21	II	R	8260 Perchlorate				
HAR-22	II	N	8260 Perchlorate		8260		Evaluation monitoring
HAR-23	III	R	8260 Perchlorate		8260		Evaluation monitoring
HAR-24	I	R	8260		8260		Evaluation monitoring FLUTe sampling system
HAR-25	I	N	8260 Perchlorate				
HAR-26	III	R	8260		8260		Evaluation monitoring
CHATSWORTH FORMATION WS WELLS							
WS-4A	I	N	8260	8260	8260	8260	Detection monitoring
WS-5	I	R	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Interim corrective action CFOU investigation
WS-6	I	R	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Interim corrective action CFOU investigation
WS-7	IV	D					
WS-8	III	R					
WS-9	II	R	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	COCs Perchlorate	Interim corrective action CFOU investigation

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VENTURA COUNTY, CALIFORNIA

Well ID	Area	Sponsor	ANALYTICAL METHODS				Existing Sampling Plan
			First Quarter	Second Quarter	Third Quarter	Fourth Quarter	
WS-9A	II	R	8260		8260		Interim corrective action
WS-9B	II	R					
WS-11	III	R					
WS-12	I	R					
WS-13	II	R					
WS-14	I	R					
WS-SP	II	N					
OFF-SITE OS WELLS AND SPRINGS							
OS-2	Off-Site	R	8260 Perchlorate				
OS-3	Off-Site	R	Perchlorate				
OS-4	Off-Site	R	8260 Perchlorate				
OS-5	Off-Site	R	Perchlorate				
OS-8	Off-Site	N	8260 Perchlorate				
OS-9	Off-Site	R					See Perchlorate Characterization Work Plan (MWH, 2003d)
OS-10	Off-Site	R	Perchlorate				
OS-12	Off-Site	N	Perchlorate				
OS-13	Off-Site	N	8260 Perchlorate		8260		
OS-15	Off-Site	N	8260 Perchlorate				
OS-16	Off-Site	N	8260 Perchlorate		8260 Perchlorate		
OS-17	Off-Site	N	8260 Perchlorate		8260 Perchlorate		
OS-21	Off-Site	R	8260 Perchlorate				
OS-24	Off-Site	N	8260		8260		FLUTE sampling system
OS-25	Off-Site	N	8260 Perchlorate		8260		
OS-26	Off-Site	N	8260 Perchlorate		8260		
OS-27	Off-Site	N	8260 Perchlorate				
OS-28	Off-Site	N	8260 Perchlorate		8260 Perchlorate		

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ANALYTICAL METHODS

Analytes/EPA Methodology

8260	=	EPA method 8260 for volatile organic compounds (most recent version).
8270	=	EPA method 8270 for base/neutral and acid organic compounds.
8015	=	EPA method 8015 modified for fuel hydrocarbons.
CN	=	Cyanide, EPA method 9012.
COCs	=	Constituents of concern (table 3 of post-closure permits plus 1,3-dinitrobenzene).
Deuterium	=	Mass spectrometry of stable isotope deuterium.
GM	=	General minerals, including calcium, magnesium, potassium, sodium, bicarbonate, carbonate, chloride, nitrate, sulfate, TDS, iron, pH, and specific conductance.
Oxygen-18	=	Mass spectrometry of stable isotope oxygen-18.
Perchlorate	=	EPA method 314.0.
TM	=	Trace metals, including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, iron, lead, manganese, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium and zinc using EPA methods 6010 and 6020.

Appendix IX

Note: The laboratory uses the most current methods which may be updated from methods listed in Appendix IX (Code of Federal Regulations, Title 40, Part 264, Appendix IX, Ground-water Monitoring List).

8081	=	EPA method 8081 for pesticides.
8082	=	EPA method 8082 for PCBs.
8141A	=	EPA method 8141A for organophosphorus pesticides.
8151A	=	EPA method 8151A for herbicides.
8260	=	EPA method 8260 for expanded list of volatile organic compounds.
8270	=	EPA method 8270 for base/neutral and acid organic compounds.
8290	=	EPA method 8290 for dioxins and furans.
Metals	=	EPA method 6020 series for metals.
CN	=	EPA method 9012 for cyanide.
Sulfide	=	EPA method 376.2 for sulfide.

Radiochemical Parameters

900.0	=	EPA method 900.0 for gross alpha and beta radioactivity
901.1	=	EPA method 901.1 for gamma-emitting radionuclides
906.0	=	EPA method 906.0 for tritium
U	=	EPA method 908.0 for isotopic uranium
Th	=	EPA method 907.0 for isotopic thorium

Note: An equivalent or superior in-house laboratory procedure will be considered acceptable for EPA methodology. Lab will use the most current promulgated version of each EPA method.

Additional radiochemistry analyses may be performed per EPA drinking water regulations:

- 1) if gross alpha activity exceeds 5 pCi/l, then Ra-226 and Ra-228 will be analyzed by EPA methods 903.1 and 904.0, respectively;
- 2) if gross alpha activity exceeds 15 pCi/l, then isotopic uranium will be analyzed by EPA method 908.0;
- 3) if gross beta activity exceeds 50 pCi/l, then K-40 and Sr-90 will be analyzed by EPA methods 901.1 and 905.0, respectively.

Evaluation Monitoring

Evaluation monitoring wells, including the point of compliance wells, will be sampled at least annually for EPA method 8260, which will detect the constituents specified in Table 5 of the post-closure permit: tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, vinyl chloride, carbon tetrachloride, methylene chloride, chloroform, methyl ethyl ketone, benzene, toluene, xylenes, and ethylbenzene.

Point of compliance wells also will be sampled every other year for a full suite of Appendix IX parameters. The sampling schedule will be 1993, 1995, 1997...etc., for all wells. The analytical parameters are listed in 40 CFR 264, Appendix IX. During off-years, wells will be sampled for a modified Appendix IX list annually (standard list of constituents for EPA methods 8260 and 8270, plus 1,4-dioxane, nitrobenzene, 1,3-dinitrobenzene, and N-nitrosodimethylamine).

Detection Monitoring

Detection monitoring wells will be sampled quarterly for EPA method 8260, which will detect the constituents specified in Table 6 of the post-closure permit: tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, cis-1,2-dichloroethylene, trans-1,2-dichloroethylene, 1,1-dichloroethylene, 1,1-dichloroethane, 1,2-dichloroethane, vinyl chloride, carbon tetrachloride, methylene chloride, and chloroform.

Interim Corrective Action Monitoring

All extraction wells will be included in the interim corrective action monitoring. These wells will be sampled annually for EPA method 8260, which will detect the constituents specified in Table 5 of the post-closure permit. The constituents are listed above under "Evaluation Monitoring."

Area IV Monitoring

Area IV sampling schedule subject to revision.

Background Monitoring

The five background wells will be sampled quarterly for the expanded list of monitoring parameters (EPA method 8260) specified in Table 5 of the post-closure permit.

Background wells are sampled every five years for the constituents of concern (Table 3 of the post closure permit) on a schedule that will follow 1994, 1999, ... etc. The background wells and the detection monitoring wells were all sampled for constituents of concern in 1996. The background wells were sampled again for constituents of concern in 1999. Background wells and detection monitoring wells were sampled for constituents of concern in 2000.

Notes:	F	=	Fluoride, EPA method 340.2
	8270	=	EPA method 8270 for acid and base/neutral semi-volatile compounds, including nitrobenzene, and 1,3-dinitrobenzene.
	Ammonia	=	Ammonia, EPA method 350.2
	Formaldehyde	=	Formaldehyde, EPA method 8315
	NDMA	=	N-nitrosodimethylamine, modified EPA method 1625
	NO ₃	=	Nitrate, EPA method 353.2
	1,4-dioxane	=	1,4-dioxane, modified EPA method 8260 or 8260 SIM

FLUTE Sampling System

FLUTE sampling system - indicates wells that currently are, or will be, equipped with FLUTE multi-port sampling systems in 2004. Samples will be collected from the FLUTE multi-port sampling systems per the previously approved workplan(s).

Laboratory Services

Laboratories will be certified by the State of California for the appropriate analytical methods.

During sampling, the field parameters of turbidity, pH, temperature and specific conductance will be measured.

REFERENCES USED IN PREPARING
2004 MONITORING SCHEDULE

1. California Department of Toxic Substances Control, 1994. Correspondence to Rocketdyne Environmental Protection Department, *Request for Modification of Analytical Parameters for Appendix IX Sampling - EPA ID Numbers CAD093365435 and CA18000900100 - Santa Susana Field Laboratory (SSFL) Rocketdyne Division Facility, Santa Susana, California*. September 13, 1994.
2. ----- 1995. *Hazardous Waste Facility Post-Closure Permit, Regional Permit No. PC-94/95-3-02 and PC-94/95-3-03*. Permits for Areas I and III and Area II, effective May 11, 1995. 22 California Code of Regulations, Chapter 15, Article 6.
3. 40 CFR 264. Code of Federal Regulations, Title 40, Part 264, Appendix IX, *Groundwater Monitoring List* and Part 265, §265.92, *Sampling and Analysis*.



APPENDIX C

Monitor Well and Piezometer Construction Data

APPENDIX C
MONITOR WELL AND PIEZOMETER CONSTRUCTION DATA

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- C-II Piezometer Construction Data

TABLE C-1

WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
Shallow Wells										
SH-01	III	10	16	0 - 10.0	4	0 - 10.0	0 - 5.0	5.5 - 10.0	1772.84	12/11/84
SH-02	III	10.6	16	0 - 10.6	4	0 - 10.6	0 - 5.0	6.0 - 10.6	1762.76	12/11/84
SH-03	III	9.5	16	0 - 9.5	4	0 - 9.5	0 - 4.6	5.0 - 9.5	1762.53	12/12/84
SH-04	III	17	16	0 - 17.0	4	0 - 13.0	0 - 8.0	9.0 - 13.0	1765.08	12/12/84
SH-05	III	10.5	16	0 - 10.5	4	0 - 10.5	0 - 5.6	6.0 - 10.5	1762.97	12/13/84
SH-06	III	11.5	16	0 - 11.5	4	0 - 11.5	0 - 6.2	7.0 - 11.5	1776.99	12/17/84
SH-07	III	13.5	16	0 - 13.5	4	0 - 13.5	0 - 8.5	9.5 - 13.5	1775.11	01/16/85
SH-08	III	12	16	0 - 12.0	4	0 - 11.4	0 - 5.2	5.9 - 11.4	1763.25	01/17/85
SH-09	III	9	16	0 - 9.0	4	0 - 9.0	0 - 3.5	4.0 - 9.0	1761.19	01/18/85
SH-10	III	8	16	0 - 8.0	4	0 - 7.5	0 - 2.0	3.0 - 7.5	1757.69	01/18/85
SH-11	III	17.5	16	0 - 17.5	4	0 - 17.5	0 - 11.0	13.0 - 17.5	1756.00	01/16/85
RS-01	I	24.5	16	0 - 24.5	4	0 - 24.5	0 - 12.5	14.5 - 24.5	1879.68	06/08/85
RS-02	I	26	16	0 - 26.0	4	0 - 26.0	0 - 15.0	16.0 - 26.0	1901.08	06/08/85
RS-03	I	21	16	0 - 21.0	4	0 - 21.0	0 - 10.0	11.0 - 21.0	1834.22	06/08/85
RS-04	I	30	16	0 - 30.0	4	0 - 30.0	0 - 18.0	20.0 - 30.0	1826.56	06/08/85
RS-05	I	20	16	0 - 20.0	4	0 - 20.0	0 - 7.5	10.0 - 20.0	1783.73	06/07/85
RS-06	I	18	16	0 - 18.0	4	0 - 18.0	0 - 7.0	8.0 - 18.0	1757.43	06/07/85
RS-07	I	7.5	16	0 - 7.5	4	0 - 7.5	0 - 1.6	2.5 - 7.5	1732.27	06/07/85
RS-08	II	12.5	16	0 - 12.5	4	0 - 12.5	0 - 5.0	7.0 - 12.5	1821.57	06/09/85
RS-09	III	26.2	16	0 - 26.2	4	0 - 26.2	0 - 14.2	16.0 - 26.2	1735.52	09/11/85
RS-10	II	17	16	0 - 17.0	4	0 - 17.0	0 - 6.0	7.3 - 17.0	1762.08	06/10/85
RS-11	IV	17.5	16	0 - 17.5	4	0 - 17.5	0 - 9.0	10.0 - 17.5	1790.39	06/10/85
RS-12	III	15.3	16	0 - 15.3	4	0 - 15.3	0 - 4.0	5.0 - 15.3	1727.48	06/09/85
RS-13	II	22.8	16	0 - 22.8	4	0 - 22.8	0 - 15.0	17.0 - 22.8	1644.20	06/11/85
RS-14	III	16	16	0 - 16.0	4	0 - 16.0	0 - 5.0	6.0 - 16.0	1734.78	06/09/85
RS-15	III	12	16	0 - 12.0	4	0 - 12.0	0 - 4.5	5.0 - 12.0	1764.86	06/10/85
RS-16	IV	20.5	16	0 - 20.5	4	0 - 20.5	0 - 14.5	16.5 - 20.5	1811.05	06/11/85
RS-17	III	16	16	0 - 16.0	4	0 - 16.0	0 - 4.0	6.4 - 16.0	1766.52	06/10/85
RS-18	IV	13	16	0 - 13.0	4	0 - 13.0	0 - 6.0	7.5 - 13.0	1802.86	06/12/85

See last page of Table C-1 for footnotes and explanations.

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TABLE C-1
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RS-19	I	15	16	0 - 15.0	4	0 - 15.0	0 - 4.8	4.8 - 15.0	1812.42	09/12/85
RS-20	I	20.5	16	0 - 20.5	4	0 - 20.5	0 - 8.5	10.5 - 20.5	1823.77	09/12/85
RS-21	II	29	16	0 - 29.0	4	0 - 24.6	0 - 3.5	14.5 - 24.6	1767.36	10/23/85
RS-22	II	31	16	0 - 31.0	4	0 - 31.0	0 - 4.0	21.0 - 31.0	1771.23	10/23/85
RS-23	IV	13	12	0 - 13.0	4	0 - 13.0	0 - 6.8	8.0 - 13.0	1887.25	08/23/88
RS-24	IV	8.5	12	0 - 8.5	4	0 - 8.5	0 - 3.0	4.0 - 8.5	1809.24	08/25/88
RS-25	IV	13.5	Trenched	0 - 13.5	4	0 - 13.5	0 - 2.0	8.5 - 13.5	1862.71	08/25/88
RS-26	Destroyed July 1989 During Soils Removal									
RS-27	IV	9	8	0 - 9.0	4	0 - 9.0	0 - 3.0	5.0 - 9.0	1804.78	08/02/88
RS-28	IV	19	8	0 - 19.0	4	0 - 19.0	0 - 9.0	14.0 - 19.0	1768.59	08/17/89
RS-29	II	38	9-7/8	0 - 38.0	4	0 - 37.5	0 - 17.0	27.0 - 37.5	1833.09	02/20/93
RS-30	I	23	12	0 - 23.0	4	0 - 21.0	0 - 9.0	10.5 - 21.0	1909.01	03/20/91
RS-31	I	18	12	0 - 18.0	4	0 - 17.5	0 - 6.0	7.0 - 17.5	1909.03	03/19/91
RS-32	I	18	12	0 - 18.0	4	0 - 17.0	0 - 6.0	6.5 - 17.0	1908.99	03/19/91
RS-54	IV	38	11-1/4 5-7/8	0 - 7.0 7.0 - 38.0	6-1/4 ---	0 - 7.0 ---	0 - 7.0	Open Hole	1846.66	08/09/93
ES-01	I	26	15	0 - 26.0	6	(v)1.3 - 25.5	0 - 6.0	15.5 - 25.5	1782.20	10/20/86
ES-02	I	17.5	15	0 - 17.5	6	(v)1.5 - 16.7	0 - 4.8	6.7 - 16.7	1814.60	10/20/86
ES-03	I	27	15	0 - 27.0	6	(v)1.3 - 27.0	0 - 9.4	17.0 - 27.0	1783.39	10/21/86
ES-04	I	20	15	0 - 20.0	6	(v)1.4 - 20.0	0 - 4.0	5.8 - 20.0	1817.24	10/21/86
ES-05	I	19	15	0 - 19.0	6	(v)1.3 - 19.0	0 - 5.8	9.0 - 19.0	1818.13	10/21/86
ES-06	I	25	15	0 - 25.0	6	0 - 25.0	0 - 5.6	11.6 - 25.0	1825.41	11/04/86
ES-07	I	23.2	15	0 - 23.2	6	0 - 23.2	0 - 6.5	8.5 - 23.2	1826.53	11/05/86
ES-08	I	24.1	15	0 - 24.1	6	0.6 - 24.1	0 - 4.7	12.1 - 24.1	1826.60	11/05/86
ES-09	I	24.2	15	0 - 24.2	6	0 - 24.2	0 - 3.4	11.9 - 24.2	1827.80	11/05/86
ES-10	I	20	15	0 - 20.0	6	0 - 20.0	0 - 5.0	9.7 - 20.0	1829.46	11/05/86
ES-11	I	27	15	0 - 27.0	6	0 - 27.0	0 - 4.2	7.2 - 27.0	1835.07	11/06/86
ES-12	I	22.5	15	0 - 22.5	6	0 - 22.5	0 - 6.9	10.9 - 22.5	1838.19	11/06/86
ES-13	I	30	15	0 - 30.0	6	(v)1.2 - 23.6	0 - 3.1	6.0 - 23.6	1782.58	11/06/86
ES-14	III	24.6	15	0 - 24.6	6	0 - 23.5	0 - 9.4	12.9 - 23.5	1728.69	11/10/86

See last page of Table C-1 for footnotes and explanations.

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TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
ES-15	III	24	15	0 - 24.0	6	0 - 24.0	0 - 10.8	13.5 - 24.0	1730.21	11/10/86
ES-16	III	24.8	15	0 - 24.8	6	0 - 24.8	0 - 4.3	8.1 - 24.8	1737.90	11/10/86
ES-17	III	28	15	0 - 28.0	6	0 - 28.0	0 - 7.9	10.4 - 28.0	1739.31	11/11/86
ES-18	II	35	15	0 - 35.0	6	0 - 26.9	0 - 9.1	12.9 - 26.9	1770.25	11/11/86
ES-19	II	33	15	0 - 33.0	6	0 - 26.3	0 - 6.3	10.3 - 26.3	1769.44	11/11/86
ES-20	II	35	15	0 - 35.0	6	0 - 23.0	0 - 3.5	9.8 - 23.0	1770.58	11/13/86
ES-21	II	35	12	0 - 35.0	6	0 - 35.0	0 - 2.2	15.8 - 35.0	1769.62	01/26/87
ES-22	II	35.5	12	0 - 35.5	6	0 - 35.5	0 - 5.2	17.5 - 35.5	1770.93	01/27/87
ES-23	III	20	12	0 - 20.0	6	0 - 20.0	0 - 2.4	10.6 - 20.0	1760.73	01/27/87
ES-24	III	30	12	0 - 30.0	6	0 - 30.0	0 - 11.7	18.3 - 30.0	1728.67	01/28/87
ES-25	III	35	12	0 - 35.0	6	0 - 35.0	0 - 9.2	19.5 - 35.0	1737.78	01/28/87
ES-26	III	35	12	0 - 35.0	6	0 - 34.5	0 - 8.7	17.5 - 34.5	1748.01	01/28/87
ES-27	III	35	12	0 - 35.0	6	0 - 35.0	0 - 9.5	15.3 - 35.0	1740.67	01/28/87
ES-28	III	21	12	0 - 21.0	6	0 - 21.0	0 - 1.7	8.9 - 21.0	1759.15	01/28/87
ES-29	III	28	12	0 - 28.0	6	0 - 28.0	0 - 8.4	11.6 - 28.0	1760.47	01/29/87
ES-30	III	25	12	0 - 25.0	6	0 - 25.0	0 - 5.5	10.1 - 25.0	1759.51	01/29/87
ES-31	IV	25	12	0 - 25.0	6	0 - 25.0	0 - 9.7	11.6 - 25.0	1787.01	01/29/87
ES-32	III	25	12	0 - 25.0	6	0 - 21.5	0 - 4.6	7.5 - 21.5	1740.65	01/29/87
HAR-02	I	30	8	0 - 30.0	4	(v)1.1 - 30.0	0 - 6.2	15.4 - 30.0	1886.38	05/12/87
HAR-03	I	30	8	0 - 30.0	4	0 - 30.0	0 - 6.2	14.7 - 30.0	1875.48	05/13/87
HAR-04	I	29	8	0 - 29.0	4	0 - 29.0	0 - 6.4	12.1 - 29.0	1873.40	05/13/87
HAR-09	II	30.5	8	0 - 30.5	4	0 - 30.5	0 - 5.9	16.1 - 30.5	1820.62	05/16/87
HAR-11	II	31	8	0 - 31.0	4	0 - 31.0	0 - 5.0	11.2 - 31.0	1827.90	05/16/87
HAR-12	III	30.5	8	0 - 30.5	4	0 - 30.5	0 - 3.5	15.5 - 30.5	1796.73	05/17/87
HAR-13	III	31.6	8	0 - 31.6	4	0 - 31.6	0 - 5.5	17.4 - 31.6	1801.18	05/17/87
HAR-14	III	40	8	0 - 40.0	4	0 - 40.0	0 - 5.5	11.8 - 40.0	1797.02	05/19/87
HAR-15	II	40	8	0 - 40.0	4	0 - 40.0	0 - 5.0	10.2 - 40.0	1809.69	05/19/87
HAR-27	II	40	8	0 - 40.0	4	0 - 40.0	0 - 3.0	21 - 40.0	1719.39	06/14/87
HAR-28	II	40	8	0 - 40.0	4	0 - 40.0	0 - 6.0	20 - 40.0	1720.17	06/14/87
HAR-29	II	40.2	8	0 - 40.2	4	0 - 40.2	0 - 7.0	20 - 40.2	1724.13	06/14/87

See last page of Table C-I for footnotes and explanations.

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TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
HAR-30	II	35	8	0 - 35.0	4	0 - 35.0	0 - 6.5	14 - 35.0	1806.47	06/15/87
HAR-31	II	40	8	0 - 40.0	4	0 - 40.0	0 - 6.0	22 - 40.0	1812.45	06/15/87
HAR-32	III	40	8	0 - 40.0	4	0 - 40.0	0 - 6.0	21 - 40.0	1736.58	06/17/87
HAR-33	III	35	8	0 - 35.0	4	0 - 35.0	0 - 6.0	18 - 35.0	1744.66	06/17/87
HAR-34	III	23	8	0 - 23.0	4	0 - 23.0	0 - 3.0	9 - 23.0	1751.17	06/17/87
CHATSWORTH FORMATION										
RD-01	I	506	15	0 - 26.0	10-1/8	0 - 26.0	0 - 26.0		1935.89	01/09/86
			8-5/8	26.0 - 506.0	---	---		Open Hole		
RD-02	I	400	15	0 - 26.0	10-1/8	0 - 26.0	0 - 26.0		1873.92	01/16/86
			8-5/8	26.0 - 400.0	---	---		Open Hole		
RD-03	I	300	15	0 - 27.0	10-1/8	0 - 27.0	0 - 27.0		1743.50	01/10/86
			8-5/8	27.0 - 300.0	---	---		Open Hole		
RD-04	II	496	15	0 - 27.0	10-1/8	0 - 27.0	0 - 27.0		1883.85	01/22/86
			8-5/8	27.0 - 496.0	---	---		Open Hole		
RD-05A	UL-S	158	12-1/4	0 - 29.5	8-1/4	0 - 29.5	0 - 29.5		1704.66	02/17/93
			6-1/4	29.5 - 158.0	---	---		Open Hole		
RD-05B	UL-S	310	15	0 - 27.0	10-1/8	0 - 27.0	0 - 27.0		1705.89	05/20/93
			9-7/8	27.0 - 310.0	5	0 - 310.0	0 - 248.0	257.6 - 310.0		
RD-05C	UL-S	480	17-1/2	0 - 29.0	12-1/8	0 - 28.0	0 - 29.0		1705.25	06/27/94
			11-7/8	29.0 - 421.0	6-1/4	0 - 418.0	0 - 421.0			
			6-1/4	421.0 - 480.0	---	---		Open Hole		
RD-06	UL-S	260	15	0 - 27.0	10-1/8	0 - 27.0	0 - 27.0		1617.21	01/31/86
			9-7/8	27.0 - 136.0	6-1/4	0 - 140.0		70.0 - 140.0		
			8-5/8	136.0 - 260.0	---	---		Open Hole		
RD-07	IV	300	15	0 - 25.0	10-1/8	0 - 25.0	0 - 25.0		1812.82	01/08/86
			8-5/8	25.0 - 300.0	---	---		Open Hole		
RD-08	III	50	15	0 - 27.0	10-1/8	0 - 27.0	0 - 27.0		1763.38	01/29/86
			8-5/8	27.0 - 50.0	---	---		Open Hole		
RD-09	II	200	15	0 - 37.0	10-1/8	0 - 37.0	0 - 37.0		1768.20	01/28/86
			8-5/8	37.0 - 200.0	---	---		Open Hole		

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TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-10	I	400	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1904.43	05/07/86
			8-3/8	30.0 - 400.0	---	---		Open Hole		
RD-11	III	71	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1762.65	10/23/86
			8-3/8	30.0 - 71.0	---	---		Open Hole		
RD-12	III	72	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1762.62	10/23/86
			8-3/8	30.0 - 72.0	---	---		Open Hole		
RD-13	IV	160	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1840.27	07/25/89
			6-1/2	30.0 - 160.0	---	---		Open Hole		
RD-14	IV	125	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1824.29	07/27/89
			6-1/2	30.0 - 125.0	---	---		Open Hole		
RD-15	IV	152	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1817.70	07/27/89
			6-1/2	30.0 - 152.0	---	---		Open Hole		
RD-16	IV	220	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1808.99	08/15/89
			6-1/2	30.0 - 220.0	---	---		Open Hole		
RD-17	IV	125	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1836.30	08/10/89
			6-1/2	30.0 - 125.0	---	---		Open Hole		
RD-18	IV	240	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1839.49	07/28/89
			6-1/2	30.0 - 240.0	---	---		Open Hole		
RD-19	IV	135	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1853.13	07/31/89
			6-1/2	30.0 - 135.0	---	---		Open Hole		
RD-20	IV	127	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1819.72	07/27/89
			6-1/2	30.0 - 127.0	---	---		Open Hole		
RD-21	IV	175	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1866.96	08/11/89
			6-1/2	30.0 - 175.0	---	---		Open Hole		
RD-22	IV	440	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1853.41	08/15/89
			6-1/2	30.0 - 440.0	---	---		Open Hole		
RD-23	IV	440	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1838.19	08/16/89
			6-1/2	30.0 - 440.0	---	---		Open Hole		
RD-24	IV	150	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1809.93	08/09/89
			6-1/2	30.0 - 150.0	---	---		Open Hole		

See last page of Table C-I for footnotes and explanations.

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TABLE C-1

WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-25	IV	175	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1810.76	08/07/89
			6-1/2	30.0 - 175.0	---	---		Open Hole		
RD-26	II	160	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1880.39	08/03/89
			6-1/2	30.0 - 160.0	---	---		Open Hole		
RD-27	IV	150	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1841.67	08/10/89
			6-1/2	30.0 - 150.0	---	---		Open Hole		
RD-28	IV	150	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1810.92	08/10/89
			6-1/2	30.0 - 150.0	---	---		Open Hole		
RD-29	IV	100	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1806.29	08/10/89
			6-1/2	30.0 - 100.0	---	---		Open Hole		
RD-30	IV	75	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1768.69	08/11/89
			6-1/2	30.0 - 75.0	---	---		Open Hole		
RD-31	I	175	12	0 - 30.0	8-1/4	0 - 30.0	0 - 30.0		1945.02	08/16/89
			6-1/2	30.0 - 175.0	---	---		Open Hole		
RD-32	OS	150	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1808.47	02/09/94
			11-7/8	19.0 - 99.0	6-1/4	0 - 99.0	0 - 99.0			
			5-7/8	99.0 - 150.0	---	---		Open Hole		
RD-33A	UL-N	320	17-1/2	0 - 11.0	12-1/8	0 - 11.0	0 - 11.0		1792.97	09/27/91
			11	11.0 - 100.0	6-1/4	0 - 100.0	0 - 100.0			
			5-1/2	100.0 - 320.0	---	---		Open Hole		
RD-33B	UL-N	415	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1793.21	09/27/91
			11	20.0 - 360.0	6-1/4	0 - 360.0	20.0 - 360.0			
			6-1/4	360.0 - 415.0	---	---		Open Hole		
RD-33C	UL-N	520	17-1/2	0 - 10.0	12-1/8	0 - 10.0	0 - 10.0		1793.54	09/21/91
			11	10.0 - 480.0	6-1/4	0 - 480.0	0 - 480.0			
			6-1/4	480.0 - 520.0	---	---		Open Hole		
RD-34A	UL-N	60	12-1/4	0 - 16.0	8-1/4	0 - 16.0	0 - 16.0		1761.83	07/25/91
			6-1/2	16.0 - 60.0	---	---		Open Hole		

See last page of Table C-1 for footnotes and explanations.

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WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-34B	UL-N	240	17-1/2	0 - 30.0	12-1/8	0 - 30.0	0 - 30.0		1762.51	08/11/91
			11	30.0 - 180.0	6-1/4	0 - 180.0	0 - 180.0			
			6-1/4	180.0 - 240.0	---	---		Open Hole		
RD-34C	UL-N	450	17-1/2	0 - 30.0	12-1/8	0 - 30.0	0 - 30.0		1762.60	08/10/91
			11	30.0 - 380.0	6-1/4	0 - 380.0	0 - 380.0			
			6-1/4	380.0 - 450.0	---	---		Open Hole		
RD-35A	I	110	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1906.68	01/24/93
			6-1/4	19.5 - 110.0	4	0 - 105.5	0 - 30.0	65.0 - 105.5		
RD-35B	I	328	24	0 - 10	18	0 - 11	0 - 11		1905.65	01/18/99
			17-1/2	10 - 162	12	0 - 158	0 - 162			
			9-7/8	162 - 328	4	0 - 324	0 - 292	303 - 324		
			3	328 - 359	---	---	328 - 359			
RD-36A	OS	95	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1913.09	01/14/94
			6-1/4	20.0 - 95.0	---	---		Open Hole		
RD-36B	OS	170	17-1/2	0 - 20.5	12-1/8	0 - 20.5	0 - 20.5		1915.26	03/13/94
			11-7/8	20.5 - 120.0	6-1/4	0 - 120.0	0 - 120.0			
			5-7/8	120.0 - 170.0	---	---		Open Hole		
RD-36C	OS	466	26	0 - 20.0	20	0 - 20.0	0 - 20.0		1913.82	04/23/94
			15	20.0 - 198.0	10-1/8	0 - 197.0	0 - 198.0			
			5-7/8	198.0 - 466.0	4	0 - 455.5	0 - 381.0	405.0 - 455.5		
RD-36D	OS	605	24-1/2	0 - 10	18	0 - 10	0 - 10		1920.08	09/10/97
			15	10 - 554	10	0 - 550	0 - 550			
			9-7/8	554 - 608	4	0 - 605	0 - 560	575 - 605		
RD-37	OS	400	17-1/2	0 - 38.0	12-1/8	0 - 38.0	0 - 38.0		1870.01	01/28/94
			11-7/8	38.0 - 260.0	4	0 - 377.0				
			7-7/8	260.0 - 400.0				272.0 - 377.0		
RD-38A	OS	120	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1878.92	02/12/94
			6-1/2	20.0 - 120.0	---	---		Open Hole		

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WELL CONSTRUCTION DATA
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VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-38B	OS	370	24	0 - 6	18	0 - 6	0 - 6		1881.45	12/15/98
			17-1/2	6 - 170	12	0 - 161	0 - 170			
			11-7/8	170 - 279	6	0 - 277	0 - 279			
			5-1/2	279 - 370	---	---		Open Hole		
RD-39A	OS	159	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1960.23	02/02/94
			6-1/2	20.0 - 159.0	---	---		Open Hole		
RD-39B	OS	477	24	0 - 12	16	0 - 12	0 - 12		1959.48	11/11/97
			15	12 - 213	10	0 - 210	0 - 213			
			9-1/2	213 - 477	4	0 - 470	0 - 424	440 - 470		
			6-1/2	477 - 500	---	---	477 - 500			
RD-40	II	300	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1972.02	01/08/93
			6-1/4	19.5 - 300.0	---	---		Open Hole		
RD-41A	II	120	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1774.48	01/10/93
			6-1/4	19.5 - 120.0	---	---		Open Hole		
RD-41B	II	390	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1774.71	10/19/93
			11-7/8	19.5 - 340.0	6-1/4	0 - 336.0	0 - 340.0			
			5-7/8	340.0 - 390.0	---	---		Open Hole		
RD-41C	II	558	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1773.73	10/05/93
			11-1/4	19.5 - 492.0	6-1/4	0 - 491.0	0 - 492.0			
			6-1/4	492.0 - 558.0	---	---		Open Hole		
RD-42	II	120	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1945.46	01/09/93
			6-1/4	19.5 - 120.0	---	---		Open Hole		
RD-43A	OS	98	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1680.16	09/09/94
			6-1/2	19.5 - 98.0	---	---		Open Hole		
RD-43B	OS	295	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1680.21	10/25/94
			11-7/8	20.0 - 240.5	6-1/4	0 - 240.5	0 - 30.5			
			6-1/2	240.5 - 295.0	---	---	115.5 - 240.5	Open Hole		

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WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-43C	OS	439.5	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1679.31	10/10/94
			11-7/8	20.0 - 370.0	6-1/4	0 - 370.0	5.0 - 140.0			
			6-1/2	370.0 - 439.5	---	---	183.0 - 219.0	Open Hole		
							318.0 - 368.0			
RD-44	I	485	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		2035.92	03/13/93
			6-1/4	20.0 - 485.0	---	---		Open Hole		
RD-45A	I	480	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1841.59	02/06/93
			6-1/2	19.5 - 480.0	---	---		Open Hole		
RD-45B	I	590	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1840.09	09/11/94
			11-7/8	20.0 - 538.0	6-1/4	0 - 538.0	0 - 127.0			
			6-1/2	538.0 - 590.0	---	---	471.0 - 538.0	Open Hole		
RD-45C	I	798	24	0 - 20.0	16	0 - 19.0	0 - 20.0		1835.74	08/26/94
			11-7/8	20.0 - 750.0	6-1/4	0 - 750.0	0 - 135.0			
			6-1/4	750.0 - 798.0	---	---	483.0 - 540.0	Open Hole		
							590.0 - 750.0			
RD-46A	I	140	12-1/4	0 - 29.5	8-1/4	0 - 29.5	0 - 29.5		1805.80	01/13/93
			6-1/4	29.5 - 140.0	---	---		Open Hole		
RD-46B	I	328	24	0 - 20	18	0 - 20	0 - 20		1807.19	12/19/98
			17-1/2	20 - 193	12	0 - 190	0 - 193			
			9-7/8	193 - 328	4	0 - 325	0 - 281	293 - 325		
			3	328 - 366	---	---	328 - 366			
RD-47	I	710	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		2045.72	04/01/93
			6-1/2	19.0 - 710.0	---	---		Open Hole		
RD-48A	UL-S	110	12-1/4	0 - 20.0	8-1/4	0 - 20.0	0 - 20.0		1736.54	03/15/93
			6-1/2	20.0 - 110.0	---	---		Open Hole		
RD-48B	UL-S	248	17-1/2	0 - 29.5	12-1/8	0 - 29.5	0 - 29.5		1735.40	05/26/93
			11-1/4	29.5 - 200.0	6-1/4	0 - 200.0	0 - 198.5			
			6-1/4	200.0 - 248.0	---	---		Open Hole		

See last page of Table C-I for footnotes and explanations.

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TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-48C	UL-S	438	17-1/2	0 - 30.0	12-1/8	0 - 30.0	0 - 30.0		1734.95	05/16/93
			11-1/4	30.0 - 371.0	6-1/4	0 - 371.0	0 - 371.0			
			6-1/4	371.0 - 438.0	---	---		Open Hole		
RD-49A	II	50	12-3/4	0 - 18.5	8-1/4	0 - 18.5	0 - 18.5		1867.25	06/08/93
			6-1/4	18.5 - 50.0	---	---		Open Hole		
RD-49B	II	298	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1867.95	06/14/93
			11-7/8	20.0 - 250.0	6-1/4	0 - 250.0	0 - 250.0			
			5-7/8	250.0 - 298.0	---	---		Open Hole		
RD-49C	II	558	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1869.45	07/07/93
			11-7/8	19.0 - 500.0	6-1/4	0 - 491.0	0 - 491.0			
			6-1/4	500.0 - 558.0	---	---		Open Hole		
RD-50	IV	195	12-3/4	0 - 18.5	8-1/4	0 - 18.5	0 - 18.5		1914.88	05/28/93
			6-1/4	18.5 - 195.0	---	---		Open Hole		
RD-51A	II	250	24	0 - 50.0	12-1/8	0 - 50.0	0 - 50.0		1832.51	07/11/91
			11-3/4	50.0 - 160.0	6-1/4	0 - 160.0	0 - 160.0			
			5-1/2	160.0 - 250.0	---	---		Open Hole		
RD-51B	II	370	24	0 - 48.0	12-1/8	0 - 48.0	0 - 48.0		1832.68	07/11/91
			11-3/4	48.0 - 300.0	6-1/4	0 - 300.0	0 - 300.0			
			5-1/2	300.0 - 370.0	---	---		Open Hole		
RD-51C	II	602	14	0 - 13.5	12-1/8	0 - 13.5	0 - 13.5		1831.65	07/09/91
			11-3/4	13.5 - 510.0	6-1/4	0 - 510.0	0 - 510.0			
			5-1/2	510.0 - 602.0	---	---		Open Hole		
RD-52A	I	137	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1755.09	01/25/93
			6-1/2	19.5 - 137.0	---	---		Open Hole		
RD-52B	I	318	17-1/2	0 - 24.0	12-1/8	0 - 24.0	0 - 24.0		1712.15	12/06/93
			11-1/4	24.0 - 200.0	6-1/4	0 - 200.0	0 - 199.0			
			5-7/8	200.0 - 318.0	---	---		Open Hole		

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WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-52C	I	678	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1712.83	11/29/93
			11-7/8	20.0 - 450.0			0 - 620.0			
			11-1/4	450.0 - 620.0	6-1/4	0 - 620.0				
			6-1/4	620.0 - 678.0	---	---		Open Hole		
RD-53	I	159	14	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1909.19	05/15/91
			12	20.0 - 77.0	6-1/4	0 - 77.0	0 - 77.0			
			5-1/2	77.0 - 159.0	---	---		Open Hole		
RD-54A	IV	278	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1841.72	08/07/93
			11-1/4	19.0 - 119.0	6-1/4	0 - 119.0	0 - 119.0			
			5-7/8	119.0 - 278.0	---	---		Open Hole		
RD-54B	IV	437	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1842.54	08/31/93
			11-1/4	19.0 - 379.0	6-1/4	0 - 379.0	0 - 379.0			
			5-7/8	379.0 - 437.0	---	---		Open Hole		
RD-54C	IV	638	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1843.77	07/27/93
			11-1/4	20.0 - 558.0	6-1/4	0 - 557.0	0 - 557.0			
			6-1/4	558.0 - 638.0	---	---		Open Hole		
RD-55A	III	106	17-1/2	0 - 28.0	12-1/8	0 - 28.0	0 - 28.0		1756.87	02/19/93
			6-1/4	28.0 - 106.0	---	---		Open Hole		
RD-55B	III	250	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1757.19	04/19/93
			11	20.0 - 199.5	6-1/4	0 - 199.5	0 - 199.5			
			5-7/8	199.5 - 250.0	---	---		Open Hole		
RD-56A	UL-N	397.5	17-1/2	0 - 20.5	12-1/8	0 - 20.5	0 - 20.5		1758.62	03/08/94
			6-1/2	20.5 - 397.5	---	---		Open Hole		
RD-56B	UL-N	463	22	0 - 10	16	0 - 10	0 - 10		1761.83	07/24/97
			15	10 - 453	10	0 - 443	0 - 443			
			6-1/2	453 - 463	---	---		Open Hole		
RD-57	UL-N	419	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1774.15	02/23/94
			6-1/2	19.5 - 419.0	---	---		Open Hole		
RD-58A	III	126	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1756.11	02/01/93
			6-1/4	19.5 - 126.0	---	---		Open Hole		

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VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-58B	III	268	17-1/2	0 - 20.0	12-1/8	0 - 20.0	0 - 20.0		1761.34	08/28/94
			11-7/8	20.0 - 220.0	6-1/4	0 - 220.0	0 - 220.0			
			6-1/2	220.0 - 268.0	---	---		Open Hole		
RD-58C	III	498	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1759.59	08/09/94
			11-7/8	19.0 - 450.0	6-1/4	0 - 450.0	0 - 450.0			
			6-1/2	450.0 - 498.0	---	---		Open Hole		
RD-59A	OS	58	17-1/2	0 - 21.0	12-1/8	0 - 21.0	0 - 21.0		1340.50	05/19/94
			6-1/2	21.0 - 58.0	---	---		Open Hole		
RD-59B	OS	214	17-1/2	0 - 19.5	12-1/8	0 - 19.5	0 - 19.5		1342.49	07/02/94
			6-1/2	19.5 - 214.0	2	0 - 209.0	0 - 161.0	178.0 - 209.0		
RD-59C	OS	398	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1345.41	07/02/94
			6-1/2	19.0 - 398.0	2	0 - 397.0	0 - 186.0			
							250.0 - 328.0	345.5 - 397.0		
RD-60	III	126	12-1/4	0 - 19.5	8-1/4	0 - 19.5	0 - 19.5		1870.40	01/21/93
			6-1/4	19.5 - 126.0	---	---		Open Hole		
RD-61	I	129	17-1/2	0 - 19.0	12-1/8	0 - 19.0	0 - 19.0		1843.88	04/26/94
			6-1/4	19.0 - 129.0	---	---		Open Hole		
RD-62	UL-S	238	17-1/2	0 - 20.7	12-1/8	0 - 20.7	0 - 19.5		1837.20	05/06/94
			6-1/2	20.7 - 238.0	---	---		Open Hole		
RD-63	IV	230	12-3/4	0 - 20.0	8-1/4	0 - 20.0	0 - 20.0		1764.85	05/10/94
			6-1/2	20.0 - 230.0	---	---		Open Hole		
RD-64	IV	398	12-1/4	0 - 19.0	8-1/4	0 - 19.0	0 - 19.0		1857.04	05/19/94
			6-1/2	19.0 - 398.0	---	---		Open Hole		
RD-65	IV	397	12-3/4	0 - 19.0	8-1/4	0 - 19.0	0 - 19.0		1819.14	08/14/94
			6-1/2	19.0 - 397.0	---	---		Open Hole		
RD-66	OS	225	22	0 - 19	12	0 - 19	0 - 19		1730.79	07/28/97
			6-1/2	19 - 225	---	---		Open Hole		
RD-67	UL-S	102	17-1/2	0 - 20	12	0 - 20	0 - 20		1901.71	09/19/97
			6-1/2	20 - 102	---	---		Open Hole		

See last page of Table C-1 for footnotes and explanations.

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TABLE C-1

WELL CONSTRUCTION DATA
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VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
RD-68A	OS	90	17-1/2	0 - 19	12	0 - 19	0 - 19		1307.64	06/05/97
			6-1/4	19 - 90	---	---		Open Hole		
RD-68B	OS	272	---	0 - 52	12	0 - 52	0 - 224	240-270	1312.44	06/11/97
			11-7/8	52 - 272	4	0 - 270				
RD-69	I	103	17-1/2	0 - 19	12	0 - 19	0 - 19		1831.28	06/16/97
			6-1/4	19 - 103	---	---		Open Hole		
RD-70	UL-N	278	17-1/2	0 - 19	12	0 - 19	0 - 19		1732.26	06/14/97
			6-1/2	19 - 278	---	---		Open Hole		
RD-71	OS	281	17-1/2	0 - 20	12	0 - 20	0 - 20		1740.02	07/27/97
			6-1/2	20 - 281	---	---		Open Hole		
RD-72	I	182	24	0 - 27	12	0 - 27	0 - 27		1907.25	12/23/97
			6-1/2	27 - 182	---	---		Open Hole		
RD-73	I	141	12	0 - 20	10	0 - 20	0 - 20		1901.60	07/19/95
			6	20 - 141	---	---		Open Hole		
RD-74	IV	101	17-1/2	0 - 30	12	0 - 30	0 - 30		1810.90	01/21/99
			6-1/2	30 - 101	---	---		Open Hole		
WS-04A	I	502	13	0 - 300.0	10-1/4	0 - 288.0	Unknown	96.0 - 288.0	1749.77	1953
			10	300.0 - 502.0	---	---		Open Hole		
WS-05	I	2304	>12-1/4	0 - 40.0	12	0 - 40.0	0 - 55.0		1830.20	1951
			12-1/4	40.0 - 2304.0	---	---		Open Hole		
WS-06	I	1440	30	0 - 6.0	12-1/8	0 - 450.0	0 - 6.0	306.0 - 450.0	1932.72	1953
			13	6.0 - 450.0	---	---				
			8-1/4	450.0 - 1440.0				Open Hole		
WS-07	IV	700	15	0 - 400.0	12-1/8	0 - 400.0	Unknown	216.0 - 400.0	1826.19	1954
			10	400.0 - 700.0	---	---		Open Hole		
WS-08	III	700	15	0 - 400.0	12-1/8	0 - 400.0	Unknown	192.0 - 400.0	1794.39	1954
			10	400.0 - 700.0	---	---		Open Hole		
WS-09	II	1800	30	0 - 17.0	12-1/8	0 - 17.0	0 - 14.0		1883.99	1955
			15	17.0 - 690.0	---	---				
			10	690.0 - 1800.0				Open Hole		

See last page of Table C-1 for footnotes and explanations.

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TABLE C-I

WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
WS-09A	II	541	30	0 - 34.0	14	0 - 34.0	0 - 20.0		1647.61	1956
			15	34.0 - 541.0	12-1/8	0 - 541.0				
					8-1/4	0 - 539.0				
WS-09B	II	220	16	0 - 220.0	---	---	Unknown	Open Hole	1796.89	1956
WS-11	III	677	13	0 - 400.0	12-1/8	0 - 400.0	Unknown	200.0 - 400.0	1748.70	1956
			9	400.0 - 677.0	8-1/4	365.5 - 615.0		365.0 - 615.0 Open Hole		
WS-12	I	1768	15	0 - 408.0	14	0 - 375.0	Unknown		1705.98	1956
			12	408.0 - 1768.0	---	---		Open Hole		
WS-13	II	940	>13	0 - 750.0	12-1/8	0 - 750.0	0 - 15.0	22.0 - 750.0	1658.62	1957
			11-1/2	750.0 - 940.0	---	---		Open Hole		
WS-14	I	1272	>16	0 - 40.0	16	0 - 40.0	Unknown		1878.23	1957
			12-3/4	40.0 - 1272.0	---	---		Open Hole		
WS-SP	II	203	Unknown	0 - 203.0	6	0 - 203.0	Unknown	Unknown	1766.76	Unknown
HAR-01	I	110	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1874.13	05/16/87
			8	30.0 - 110.0	---	---		Open Hole		
HAR-05	II	180	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1812.65	05/16/87
			8	30.0 - 180.0	---	---		Open Hole		
HAR-06	II	160	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1815.03	05/16/87
			8	30.0 - 160.0	---	---		Open Hole		
HAR-07	II	100	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1728.38	05/20/87
			8	30.0 - 100.0	---	---		Open Hole		
HAR-08	II	130	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1730.75	05/20/87
			8	30.0 - 130.0	---	---		Open Hole		
HAR-16	I	120	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1872.31	05/20/87
			8	30.0 - 120.0	---	---		Open Hole		
HAR-17	II	100	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1711.59	05/20/87
			8	30.0 - 100.0	---	---		Open Hole		
HAR-18	III	80	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1749.41	05/20/87
			8	30.0 - 80.0	---	---		Open Hole		

See last page of Table C-I for footnotes and explanations.

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WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
HAR-19	II	220	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1833.42	06/17/87
			8	30.0 - 220.0	---	---		Open Hole		
HAR-20	II	230	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1830.47	06/16/87
			8	30.0 - 230.0	---	---		Open Hole		
HAR-21	II	130	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1821.30	06/18/87
			8	30.0 - 130.0	---	---		Open Hole		
HAR-22	II	90	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1816.41	06/18/87
			8	30.0 - 90.0	---	---		Open Hole		
HAR-23	III	90	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1805.87	06/18/87
			8	30.0 - 90.0	---	---		Open Hole		
HAR-24	I	110	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1906.89	06/18/87
			8	30.0 - 110.0	---	---		Open Hole		
HAR-25	I	90	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1889.75	06/18/87
			8	30.0 - 90.0	---	---		Open Hole		
HAR-26	III	90	15	0 - 30.0	10-1/8	0 - 30.0	0 - 30.0		1763.23	06/18/87
			8	30.0 - 90.0	---	---		Open Hole		
PRIVATE OFF-SITE WELLS AND SPRINGS										
OS-01	OS	288	Unknown	Unknown	10	0 - 52	Unknown		1310.34	Unknown
		(converted to RD-68B)			---	---		Open Hole		
OS-02	OS	700	Unknown	Unknown	10	0 - 17	0 - 17		1237.01	03/18/59
					---	---		Open Hole		
OS-03	OS	100	Drilled with cable tools		8-1/4	0 - 59	0 - 30	30 - 60	1298.15	06/12/50
					---	---		Open Hole		
OS-04	OS	Well Construction Data Unresolved or Not Available							1334.00	
OS-05	OS	Well Construction Data Unresolved or Not Available								
OS-08(S)	OS									
OS-09	OS	Well Construction Data Unresolved or Not Available								
OS-10	OS	600	18	0 - 10	12-1/8	0 - 10	0 - 10		1016.97	12/54
			12	10 - 600	---	---		Open Hole		
OS-12(S)	OS									

See last page of Table C-I for footnotes and explanations.

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TABLE C-I
WELL CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Area No.	Effective Borehole Depth (feet)	Borehole		Casing		Sealed Interval (feet)	Perforated Interval (feet)	Measuring Point Elevation (ft MSL)	Date Drilling Completed
			Diameter (inches)	Interval (feet)	Inside Diameter (inches)	Interval (feet)				
OS-13(S)	OS									
OS-15	OS	218	Drilled with cable tools		8-1/4	0 - 40	0 - 40		1404.86	08/27/60
					---	---		Open Hole		
OS-16	OS	Well Construction Data Unresolved or Not Available							1785.05	
OS-17	OS	425	Drilled with cable tools		0 - 25			1564.07		
				---	---		Open Hole			
OS-21	OS	Well Construction Data Unresolved or Not Available							1900.39	
OS-24	OS	515	10	0 - 40	6-1/4	0 - 40	0 - 40		1947.30	12/02/87
			6	40 - 515	---	---		Open Hole		
OS-25	OS	515	10	0 - 36	6-1/4	0 - 36	0 - 36		2043.58	12/10/87
			6	36 - 515	---	---		Open Hole		
OS-26	OS	515	10	0 - 40	6-1/4	0 - 40	0 - 40		2080.58	11/16/87
			6	40 - 515	---	---		Open Hole		
OS-27	OS	477	10-1/4	0 - 30	10	0 - 5.5	0 - 30		2043.90	05/16/95
			6-1/8	30 - 477	6	0 - 30		Open Hole		
OS-28	OS	Well Construction Data Unresolved or Not Available								

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TABLE C-1
FOOTNOTES AND EXPLANATIONS

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Depth/intervals are measured in feet below land surface.

Note: Well OS-1 was converted to well RD-68B in 1997.

(---)	=	No casing installed over the borehole interval specified; open hole.
(v)	=	Top of well below land surface, installed inside zero-grade vault.
S	=	Spring; construction data not applicable.
UL-N	=	Undeveloped land north of Facility
UL-S	=	Undeveloped land south of Facility.
OS	=	Off-site

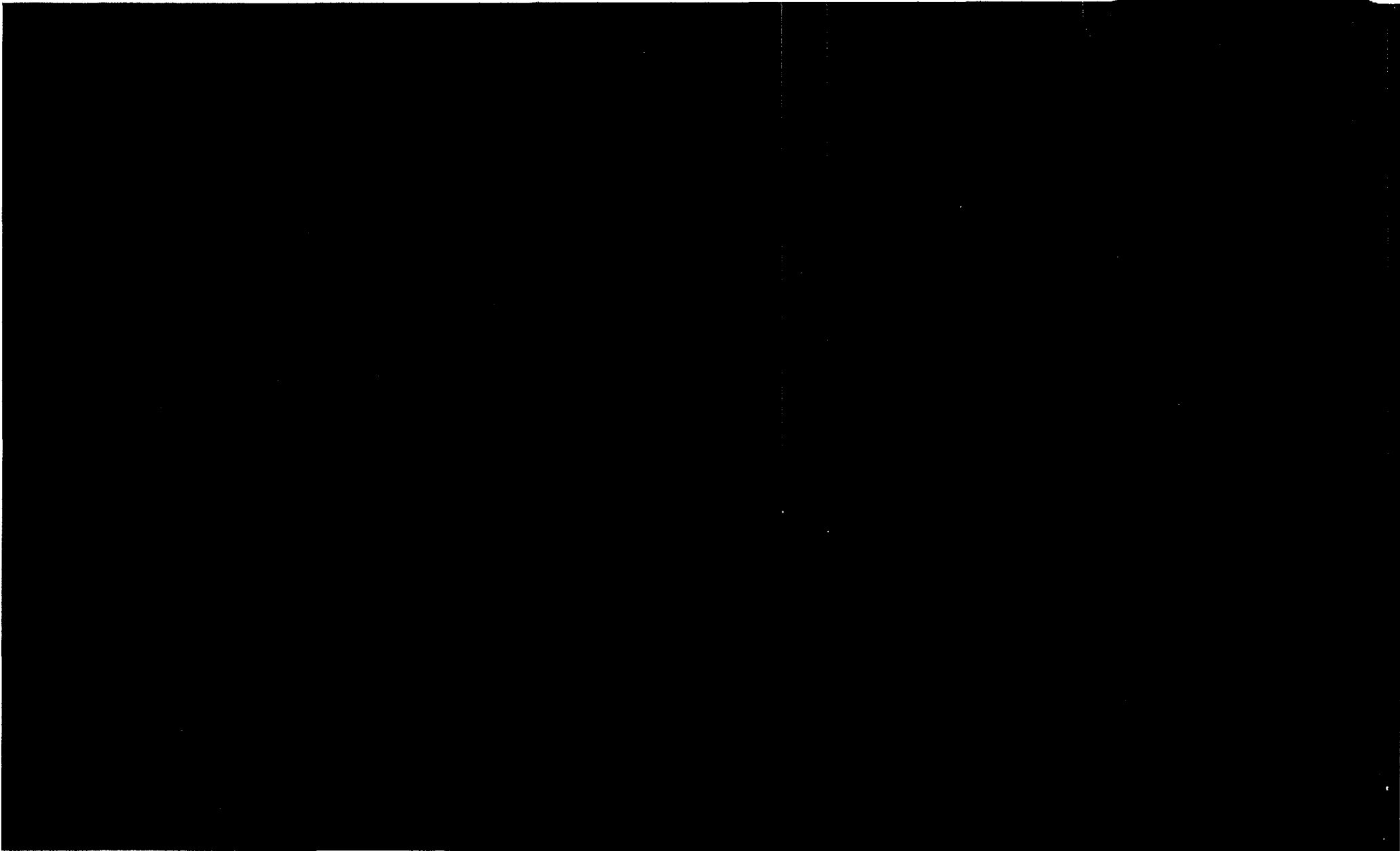
TABLE C-II
PIEZOMETER CONSTRUCTION DATA
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Piezometer ID	Area	Northing (feet)	Easting (feet)	MP Elevation (feet)	Date Drilled	Total Depth (feet bgs)	Screened Interval (feet bgs)	Sand Interval (feet bgs)	Bentonite Interval (feet bgs)	Grout Interval (feet bgs)	Concrete Interval (feet bgs)
PZ-012A	I	266871.1	1794033.3	1827.69	11/16/00	N/A	4.75-5.25	4-6	2-4	N/A	0-2
PZ-012B	I	266871.1	1794033.3	1827.69	11/16/00	N/A	10.75-11.25	10-12	6-10	N/A	N/A
PZ-012C	I	266871.1	1794033.3	1827.69	11/16/00	N/A	16.75-17.25	16-18	12-16	N/A	N/A
PZ-012D	I	266871.1	1794033.3	1827.69	11/16/00	N/A	21.25-21.75	20.5-22.5	18-20.5	N/A	N/A
PZ-012E	I	266871.1	1794033.3	1827.69	11/16/00	N/A	26.75-27.25	25-28	22.5-25	N/A	N/A
PZ-012F	I	266871.1	1794033.3	1827.69	11/16/00	37.0	34.75-35.25	34-37	28-34	N/A	N/A

Footnotes and Explanations:

bgs = Below ground surface.

N/A = Not applicable.



APPENDIX D

Quality Assurance Assessment

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1. OVERVIEW

Field and laboratory data were reviewed according to procedures outlined in the *Groundwater Monitoring, Quality Assurance Project Plan, Santa Susana Field Laboratory* (Groundwater Resources Consultants, Inc., 1995) following each 2003 quarterly groundwater sampling event. Results of the review are discussed in the following sections. The analytical results for these samples were subjected to a data validation process summarized in 3.2.3 of this appendix. During April 2003, several samples were collected for the analysis of Appendix IX constituents. The analytical results for these samples were subjected to a data validation process summarized in Appendix H.

2. INTRODUCTION

2.1 Quality Assurance/Quality Control Procedures

Following each 2003 quarterly groundwater sampling event, field and laboratory data were reviewed according to procedures outlined in the *Groundwater Monitoring, Quality Assurance Project Plan, Santa Susana Field Laboratory* (Groundwater Resources Consultants, Inc., 1995). As the project develops, it is anticipated that the quality assurance assessment conducted by Haley & Aldrich following each quarterly event will be modified. The current procedures include reviewing field forms and documentation and evaluating whether field data were complete. Analytical data were reviewed by the laboratory for precision, accuracy, representativeness, and comparability as part of its standard QA/QC program. QA/QC data were submitted as part of the laboratory QA/QC package. Analytical data also were reviewed by Haley & Aldrich for data representativeness, reproducibility, completeness, erroneous data, and discrepancies.

Del Mar Analytical of Irvine, California served as the primary laboratory for all analyses except for the following:

- 1,4-dioxane - analyzed by Ceimic Corporation of Narragansett, Rhode Island;
- N-Nitrosodimethylamine (NDMA) - analyzed by Weck Laboratories of City of Industry, California and Pacific Analytical of Carlsbad, California;
- Radiochemistry analyses - conducted by Eberline Services of Richmond, California;
- Split radiochemistry analyses – conducted by Severn Trent Laboratories of Richland, Washington;
- Split samples were analyzed by American Analytics of Chatsworth, California for volatile organic compounds and perchlorate, by Ceimic Corporation for perchlorate, and by Del Mar Analytical for 1,4-dioxane; and
- Oxygen-18 and deuterium – analyzed by the University of Ottawa G.G. Hatch Laboratories of Ottawa, Ontario, Canada.

Haley & Aldrich field and analytical data reviews are summarized below.

Completeness values presented in this summary were calculated using the following equation:

$$C = \left[1 - \frac{\text{number of incomplete results}}{\text{total number requested}} \right] \times 100$$

The values shown in parentheses in this summary are simply percentages and are not completeness values. The percentages are provided as a quick reference.

3. QA/QC EVALUATION

3.1 Field Data

3.1.1 Pre-Sampling Water Levels

During each quarterly sampling event, 234 wells were scheduled for water level monitoring. During the first quarter, 234 wells were monitored (100%); 227 wells were monitored during the second quarter (97%); 231 wells were monitored during the third quarter (99%); and 232 wells were monitored during the fourth quarter (99%). Out of the 234 wells monitored, water level measurements were obtained for 169, 197, 188, and 171 wells during the first, second, third, and fourth quarters, respectively. Water levels were not obtained from the other wells because the wells were dry, inaccessible, or needed repair.

Based upon the number of monitoring attempts versus the scheduled number, the completeness value for water level monitoring was 100% for the first quarter, 97% for the second quarter, 99% for the third and fourth quarters.

3.1.2 Groundwater Sample Collection

During the quarterly sampling events, the number of wells scheduled for sampling ranged from 117 to 188 wells, with the maximum number of scheduled wells occurring during the first quarter of 2003. Of the wells scheduled for sampling, the percentage sampled each quarter ranged from 42% to 71%. Samples were not collected at a number of wells because the wells were dry or contained inadequate water for sampling purposes, the wells were inaccessible, or the well equipment malfunctioned. Sample collection at several Chatsworth Formation wells was postponed during the third and fourth quarters to accommodate the C-1 corehole pumping test conducted by MWH. Wells affected by the C-1 test will be sampled following the completion of the test.

Comparing the number of wells that could be sampled versus the schedule, the field completeness value for water sample collection was 100% for the first quarter, 68% for the second quarter, and 100% for the third and fourth quarters.

3.1.3 QA/QC Sample Collection

Duplicate samples, split samples, field blanks, and trip blanks comprise the QA/QC sample collection program. The QA/QC target for duplicate samples is 10% of sampled wells. Split samples are collected from wells requiring verification sampling and from randomly selected wells, and typically comprise 5% of all sampled wells. Field blanks are collected each day that volatile organic samples are collected. Trip blanks are included with each shipment of VOC samples.

Results of QA/QC sample collection during 2003 are summarized below. The results do not include OS-09 sampling.

QA/QC Sample Type	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
Percent of samples duplicated	8	10	12	20
Percent of samples split	6	8	4	33
Field blank completeness value	63	81	56	56
Trip blank completeness value	94	86	63	22

In 2004, field staff will receive additional on-site training on the collection of field blanks and trip blanks.

3.1.4 Water Quality Parameter Measurements

Each water quality parameter (pH, temperature, electrical conductivity, and turbidity) is measured at least three times before sample collection, except at wells that function as extraction wells and thus are already pumping prior to the quarterly sampling event; wells that bail or pump dry prior to purging three well volumes; at private wells; at flowing artesian wells; at flowing springs; and at wells equipped with multi-level FLUTe systems. Water quality parameters were measured at least once at all wells sampled during 2003 except at eight wells from the first quarter, five wells from the second quarter, eleven wells from the third quarter, and one well from fourth quarter. During the first through fourth quarters of 2003, field parameters were not measured according to established protocols at a number of wells due to sampler oversight or parameter equipment malfunction. The completeness values for field parameters measured at least three times prior to sample collection were 97%, 99%, 97%, and 98%.

3.2 Analytical Data

3.2.1 Comparison with Historical Water Quality Data

There were some instances where analyte concentrations had increased or decreased in groundwater samples collected during 2003, but most values were within the range of historic data. For several samples, constituents were detected for the first time due to the very low method detection limits reported by the laboratory. During each quarter, the laboratories were requested to confirm suspect results. Verification sampling was scheduled for a number of detection monitoring wells during 2003. Verification samples collected during 2003 did not confirm the presence of contaminants at detection monitoring wells. Additional verification sampling confirmed the presence of NDMA at point of compliance well HAR-07 and provided VOC concentration trend data for evaluation monitoring wells RD-55A and RD-55B and interim corrective action well WS-09A. A summary of unusual results is included in Section 2.2 of this report.

3.2.2 Lab Performance Comparison

Results of the split samples are presented in Table D-I. Relative percent differences (RPDs) were calculated for each compound detected by both the primary and split laboratories, and for compounds detected at concentrations exceeding the product of five times the method detection limit times the dilution factor. RPD values calculated for 2003 split samples ranged from 0% to 67%.

Perchlorate spike samples were submitted to Del Mar Analytical and Ceimic Corporation on July 17, 2003. The spike samples consisted of both de-ionized water samples and groundwater samples from well OS-09 spiked with perchlorate at a concentration of 5.0 micrograms per liter (ug/l). The spikes were prepared by Environmental Resource Associates (ERA) of Arvada, Colorado using de-ionized water and groundwater collected from well OS-09 on July 10, 2003.

A second set of perchlorate spike samples were submitted to Del Mar Analytical and Ceimic Corporation on August 12, 2003. Again, the spike samples consisted of both de-ionized water samples and OS-09 groundwater samples. The August 12, 2003 matrix spikes were prepared in the field by a Del Mar Analytical chemist at the well OS-09 location. The matrix spikes were prepared using well OS-09 groundwater immediately after it was collected. The reagent de-ionized water spikes were prepared at the Del Mar Analytical laboratory. The August 12, 2003 spikes were prepared at three concentrations (5.0 ug/l, 50 ug/l, and 150 ug/l). Reagent de-ionized water blanks were also prepared by Del Mar Analytical.

3.2.2.1 July 17 Matrix Spike Samples

The reported perchlorate concentration in the 5.0 ug/l groundwater matrix and reagent de-ionized water spike samples submitted with the July 17, 2003 groundwater samples ranged from 4.3 to 5.2 ug/l. Perchlorate was less than the detection limit in all reagent de-ionized water blanks analyzed. The detection limits were 0.8 ug/l for Del Mar Analytical and 0.35 ug/l for Ceimic Corporation.

3.2.2.2 August 12 Matrix Spike Samples

The reported perchlorate concentration in the 5.0 ug/l field groundwater matrix and reagent de-ionized water spike samples submitted with the August 12, 2003 groundwater samples ranged from 4.2 to 4.6 ug/l.

The reported perchlorate concentration in the 50 ug/l field groundwater matrix and reagent de-ionized water spike samples submitted with the August 12, 2003 groundwater samples ranged from 49 to 49.9 ug/l.

The reported perchlorate concentration in the 150 ug/l field groundwater matrix and reagent de-ionized water spike samples submitted with the August 12, 2003 groundwater samples ranged from 140 to 150 ug/l.

Perchlorate was less than the detection limit in all reagent de-ionized water blanks analyzed. The detection limits were 0.8 ug/l for Del Mar Analytical and 0.35 ug/l for Ceimic Corporation.

3.2.3 Field Duplicate Sample Precision

Water quality data were precise as indicated by the relative percent differences (RPDs) of field duplicate samples (Table D-II). RPDs ranged from 0% to 42%. Two of the RPDs from the second quarter exceeded the laboratory RPD limit of 40% for VOC analyses by EPA Method 8260B. None of the other RPDs exceeded the laboratory RPD limits for VOC analyses, metals, NDMA, perchlorate, and inorganics.

3.2.4 Data Representativeness, Reproducibility, and Completeness

Data representativeness, reproducibility, and completeness of 2003 results were evaluated by verifying the following:

- all locations were sampled as scheduled,
- samples were properly collected and preserved (if required),
- procedures to maintain the integrity of samples during shipment were followed,
- sample dilutions were properly conducted,
- chain-of-custody records were complete when submitted or changed appropriately, and
- laboratory QA/QC data were obtained for each sample submitted.

All locations were sampled as scheduled except at locations where wells contained insufficient water volume, where equipment problems were encountered, or where wells were inaccessible. All samples were preserved (where necessary) and shipped following acceptable procedures. Samples from wells with TCE concentrations exceeding 3,000 ug/l were segregated during storage and shipment.

A few chain-of-custody (COC) forms were not completed satisfactorily. Because the laboratories were notified of the deficiencies immediately following sample submission, all samples submitted were identified correctly and analyzed according to the monitoring schedule. Field personnel were informed of the custody form deficiencies and provided an example of a completed custody form. Some 1,4-dioxane samples were shipped to Del Mar Analytical (DMA) instead of Ceimic for analysis during the third quarter, but the samples were subsequently shipped by DMA to Ceimic so the analyses were not delayed beyond holding times.

All samples were received appropriately, identified correctly, and analyzed according to the monitoring schedule except for two radiochemistry samples that were lost due to container failure during shipment. Adequate sample volume was available to perform all radiochemistry analyses except for gross alpha/beta and gamma-emitting radioisotope analyses of samples collected from well RD-27 during the first quarter. Field personnel were informed of the sample losses and instructed to seal container lids with tape and to pack sample coolers more carefully.

3.2.5 Data Usability Summary

Analytical results for 342 groundwater samples, 80 trip blank samples, 54 field blank samples, and site specific matrix spike and matrix spike duplicate samples (MS/MSD) were reviewed to evaluate the data usability for 2003. These data were assessed in accordance with guidance from the United States Environmental Protection Agency (USEPA) National Functional Guidelines for Organic Data Review (EPA540/R-99/008, October 1999), National Functional Guidelines for Inorganic Data Review (EPA540/7-02, July 2002) and the EPA Method specific protocol criteria, where applicable. Except for Appendix IX samples, this section pertains to the groundwater samples collected by Haley & Aldrich personnel during 2003. A data usability report of the Appendix IX samples is provided in Appendix H of this report.

The following items/criteria applicable to the QA/QC data and sample analysis data listed above were reviewed:

- Chain of Custody Procedures
- Analytical Holding Time Compliance
- Method Blank, Trip Blank, and Field Blank Sample Analyses
- Surrogate Compound Recoveries
- Laboratory Control Sample Analyses
- Matrix Spike Sample Analyses
- Sample Data Reporting Procedures
- Laboratory Data Qualification Procedures

3.2.5.1 Chain of Custody Procedures

External chain of custody documentation was completed by Haley & Aldrich personnel during the performance of sampling activities conducted at SSFL. The external COC documents were completed appropriately upon sample transfer to the primary analytical laboratory personnel (Del Mar Analytical, Ceimic Corporation, Eberline Services, Severn Trent, American Analytics, Pacific Analytical and G.G. Hatch Laboratories). A number of N-Nitrosodimethylamine (NDMA) samples were subcontracted by Del Mar Analytical to Weck Laboratories.

A review of the COC documents indicate that the sample custody remained intact through the analytical process and the reported results are representative of the samples collected at SSFL. The external COC documents are provided with each laboratory report.

No corrective action is recommended.

3.2.5.2 Holding Time Compliance

Maximum allowable holding times as prescribed by the USEPA, "Test Methods for Evaluating Solid Waste", SW-846, 3rd Edition, Update III, 1996 were applied to the evaluation of each project sample. Holding time compliance was measured from the time of sample collection to the time of sample preparation or analysis. Each project sample was initially analyzed within the maximum allowable holding time.

3.2.5.3 Blank Sample Analyses

Trip blank samples were provided by Del Mar Analytical and Ceimic Corporation and accompanied the project sample containers to and from the project site to assess possible field/container contamination. Trip blank samples were analyzed by Del Mar Analytical for VOCs only and by Ceimic Corporation for 1,4-dioxane only. Method blank samples were prepared by the analytical laboratories and analyzed concurrently with the project samples to assess possible laboratory contamination. Field blank samples were prepared at sampled wells using de-ionized water provided by Del Mar Analytical. Several target compounds were detected in associated field blank and trip blank samples and in method blank samples prepared and analyzed with the project samples. Table D-III provides a list of the target compounds detected in the project trip blanks, field blanks, and/or method blank samples which required corrective action; the associated project samples; and the recommended corrective action for the presentation of the sample analysis results. Target compounds detected in blank samples that did not require corrective action are not included in the table.

In accordance with cited USEPA guidelines, positive VOC sample results should be reported unless the concentration of the compound in the project sample is less than or equal to 10 times (10X) the amount in any blank for the common laboratory contaminants (methylene chloride, acetone, 2-butanone, cyclohexane), or 5 times (5X) the amount for other target compounds. Sample results that were qualified with a "U" flag as a result of detection in blank samples are listed in Table D-III.

Several metals were detected in method blank samples prepared and analyzed concurrently with the project samples. These results were flagged with "B" by the laboratory indicating that the concentration of the analyte within the sample was less than 10 times (10X) the amount detected in the associated method blank. For these samples, the reported analyte result was also flagged with a "U" indicating that the concentration of the analyte detected in the sample was most likely due to laboratory contamination and was not indicative of the field sample conditions.

Volatile fuel hydrocarbons were detected in method blank samples prepared and analyzed with project samples. These results were flagged by the laboratory with "B" indicating that the concentration of the analyte within the sample was less than or equal to 5 times (5X) the amount for the target compound. For these samples, the reported analyte result was flagged with a "U" indicating that the concentration of the analyte detected in the sample was most likely due to laboratory contamination and was not indicative of the field sample conditions.

3.2.5.4 Surrogate Compound Recoveries

Surrogate compounds were added to each sample prior to analysis to confirm the efficiency of the purge and trap sample preparation procedure by EPA Method 8260B and the extraction and concentration process by EPA Method 8270C. The surrogate compound recovery calculated in percentage is presented on each report for the project sample analyses. The calculated recovery of surrogate compounds for each sample fell within method specific acceptance criteria without exception. Based on the reported recovery performance of the surrogate compounds, no additional qualification of the reported results is recommended.

3.2.5.5 Laboratory Control Sample (LCS/LCSD) Analyses

Analytical precision and accuracy was evaluated based on laboratory control sample (LCS) analysis performed concurrently with the project samples. LCS analyses included the addition of a known amount of each target analyte into lab pure water using a traceable reference material independent of the instrument calibration materials. LCS samples were analyzed to confirm the precision and accuracy of the analytical system calibration.

The percent recovery calculated for each target analyte fell within laboratory specific criteria indicating that the analyses were conducted with acceptable analytical accuracy and precision with

some exceptions (Table D-IV). During the second, third, and fourth quarters, LCS percent recoveries were below the percent recovery criteria for benzidine. Reported as non-detected in the associated samples, the benzidine results were qualified with an "R" indicating that the results were rejected because the presence or absence of the analyte could not be verified.

3.2.5.6 Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses

Analytical precision and accuracy was evaluated based on the Matrix Spike and Matrix Spike Duplicate analyses performed on the project samples within each sample delivery group (SDG). After the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability of the analytical systems to identify these compounds within the sample matrix. Due to limitation of sample volume, some SDGs contained reports of MS/MSD analyses performed on sample matrices from non-project related samples. However, the analysis of these samples concurrently with the project samples provides valuable information on the accuracy of the analyses performed.

The percent recovery calculated for each target analyte fell within laboratory specific criteria with one exception (Table D-IV). A fourth quarter matrix spike recovery for cis-1,2-dichloroethene fell below the laboratory acceptance criteria. Positive cis-1,2-dichloroethene results reported in samples associated with this matrix spike were qualified with a "J", indicating the results were estimated because the percent recovery was less than the lower acceptance limit in the matrix spike.

3.2.5.7 Calibration Verification Recovery

Calibration verification percent recoveries were below the upper acceptance limits in all target compounds with a few exceptions (Table D-V). Where calibration verification recoveries exceeded the upper acceptance limits, the analytes were not detected in the associated field samples and were qualified with a "UJ", indicating that the reported sample quantitation limit is approximate.

3.2.5.8 Continuing Calibration Recovery

The continuing calibration verification percent recovery was less than 50% of initial calibration in one target compound from the third quarter, N-Nitrosodimethylamine (Table D-VI). For the affected field sample, OS-28 (08/22/03), the NDMA result had been reported as detected and was qualified with an "R", indicating that the result was rejected.

3.2.5.9 Data Qualification of Samples by AMEC

Validation of OS-09 perchlorate samples was performed by AMEC Earth & Environmental (Table D-VII). For OS-09 samples where the continuing calibration verification recoveries and confirmation spike recoveries exceeded the acceptance limits, the affected samples were qualified with a "UJ", indicating that the reported sample quantitation limit is approximate.

AMEC Earth & Environmental also reviewed OS-28 NDMA sample results. For the primary sample collected on 18 September 2003, the result was rejected due to a laboratory spike deficiency (Table D-VII).

3.2.5.10 Sample Data Reporting

Sample data were reported in summary reports containing laboratory specific data qualifiers. The reporting limit values for the dilution analyses were adjusted for the level of dilution performed. When an analysis was performed without dilution, the reporting limit was based on the most recent method detection limit (MDL) study conducted by the contract laboratory. Values presented for target compounds detected at concentrations below the reporting limit but above the MDL were flagged with a "J" as estimated values. Generally, MDL studies were performed within 180 days of the project sample analyses conducted without exception. No corrective action is recommended.

3.2.5.11 Data Qualifiers

The use of the data qualifiers is intended to aid data users in their interpretation of the sample results. Laboratory specific data qualifiers were assigned by the laboratories to the reported results in accordance with each laboratory's standard operating procedures. However, the data qualifiers used by Del Mar Analytical do not correspond with standard USEPA guidance as referenced in this document. As such, the data qualifiers recommended above in accordance with the USEPA guidelines should preclude the use of the laboratory specific qualifiers so that comparability of the reported results can be achieved if future analyses are performed at other laboratory facilities.

The results presented in each report were found to be compliant with the data quality objectives (DQOs) for the project and usable, with the few exceptions noted above. Based on our review, the

data usability is compliant with a completeness goal of greater than 95%.

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TABLE D-I
SUMMARY OF 2003 SPLIT RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Primary Sample Result (ug/l)	Split Sample Result (ug/l)	RPD
Shallow Wells						
ES-30	02/20/03	8260B	Trichloroethene	79	63	23
			Acetone	16	3 U	—
			1,1-Dichloroethene	0.40 J	0.3 U	—
			cis-1,2-Dichloroethene	0.65 J	0.2 U	—
RS-08	04/14/03	8260B	cis-1,2-Dichloroethene	7.8	6.3	21
			trans-1,2-Dichloroethene	0.91 J	0.75	NA
			Vinyl chloride	0.75 J	0.2 U	—
RS-25	03/28/03	314.0	Perchlorate	0.8 U	1.546	—
	05/01/03	314.0	Perchlorate	0.8 U	2 U	—
SH-04	04/14/03	8260B	1,1,1-Trichloroethane	4	4	NA
			1,1-Dichloroethane	14	12	15
			1,1-Dichloroethene	5 J	4.3	NA
			1,2-Dichloroethane	6.2	7.3	16
			Carbon tetrachloride	170	170	0
			Chloroform	51	50	2
			cis-1,2-Dichloroethene	11	10	10
			Tetrachloroethene	13	16	21
			Trichloroethene	69	70	1
Chatsworth Formation Wells						
RD-04	05/07/03	8260SIM	1,4-Dioxane	0.331 U	0.45 U	—
RD-05B	11/10/03	8260B	VOCs	None detected		—
RD-13	11/12/03	8260B	Toluene	1.7	1.3	NA
			Trichloroethene	0.66 J	0.2 U	—
RD-16	05/13/03	8260B	VOCs	None detected		—
RD-21(Z2)	11/17/03	8260B	1,1-Dichloroethene	0.32 J	0.3 U	—
			Benzene	0.28 J,F	0.1 U	—
			Carbon tetrachloride	7.3	6	20
			Chloroform	3.2	2.4	29
			cis-1,2-Dichloroethene	170	180	6
			Toluene	5 F	3.8 F	50
			trans-1,2-Dichloroethene	4.4	0.2 U	—
			Trichloroethene	69	59	16
RD-22(Z2)	02/24/03	8260B	Acetone	13 F	3 U	—
			Benzene	0.46 J, F	0.1 U	—
			Toluene	1.4 F	0.2 U	—
RD-24	11/14/03	901.1	Gamma (pCi/l)	None detected		—
		900.0	Gross Alpha (pCi/l)	5.06 +/- 3.4	11.6 +/- 4.56	NA
		900.0	Gross Beta (pCi/l)	9.29 +/- 3.4	13.3 +/- 4.16	NA
		906.0	Tritium (pCi/l)	185 U +/- 120	237 +/- 65	—
		903.1	Radium-226 (pCi/l)	0.654 J +/- 0.075	1.15 +/- 0.338	NA
		904.0	Radium-228 (pCi/l)	1.61 +/- 0.27	2.93 J +/- 0.884	NA
RD-27	11/14/03	901.1	Gamma (pCi/l)	None detected		—
		900.0	Gross Alpha (pCi/l)	1.68 U +/- 1.7	4.91 +/- 2.29	—
		900.0	Gross Beta (pCi/l)	6.79 +/- 2.3	7.05 +/- 2.35	NA
		906.0	Tritium (pCi/l)	-11.2 U +/- 110	9.54 U +/- 48.9	—
RD-33C	11/13/03	906.0	Tritium (pCi/l)	107 U +/- 110	-23.3 U +/- 46.7	—
RD-37	02/17/03	8260B	Acetone	11 U	28	—
RD-41C	02/20/03	8260B	VOCs	None detected		—
RD-48B	02/18/03	8260B	Acetone	5.7 J,L	3 U	—
	09/03/03	8260B	VOCs	None detected		—
RD-49A	05/07/03	8260SIM	1,4-Dioxane	0.65 J	0.73 U	—
RD-49B	05/06/03	8260SIM	1,4-Dioxane	2.76	2.4 U	—
	11/17/03	8260SIM	1,4-Dioxane	2.3	0.93 J	NA

TABLE D-I
SUMMARY OF 2003 SPLIT RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Primary Sample Result (ug/l)	Split Sample Result (ug/l)	RPD
RD-49C	11/18/03	8260SIM	1,4-Dioxane	0.6 U	0.49 U	—
RD-51B	11/06/03	314.0	Perchlorate	0.8 U	0.35 U	—
RD-51C	02/21/03	8260B	VOCs	None detected		—
	11/07/03	314.0	Perchlorate	0.8 U	0.35 U	—
		8260B	VOCs	None detected		—
RD-55A	02/13/03	8260B	Chloromethane	0.37 J	0.4 U	—
			cis-1,2-Dichloroethene	84	75	11
			trans-1,2-Dichloroethene	3	1.5	67
			Trichloroethene	83	72	14
			Vinyl chloride	5.4	4	30
	08/18/03	8260B	1,1-Dichloroethene	1.6 U	1.2	—
			Chloroform	1.8 J,S	0.2 U	—
			cis-1,2-Dichloroethene	560	500	11
			Methylene chloride	14 J,L	3 U	—
			trans-1,2-Dichloroethene	30	24	22
			Trichloroethene	490	430	13
			Vinyl Chloride	73	68	7
RD-55B	08/22/03	8260B	cis-1,2-Dichloroethene	9.5	7.9	18
			Trichloroethene	12	12	0
RD-56B	11/11/03	8260B	Trichloroethene	0.35 J	0.2 U	—
RD-59A	05/15/03	900.0	Gross Alpha (pCi/l)	3.55 +/- 2.0	3.53 +/- 1.94	NA
		900.0	Gross Beta (pCi/l)	7.58 +/- 2.8	14 +/- 3.88	NA
		906.0	Tritium (pCi/l)	29.7 U +/- 100	-12.3 U +/- 51.5	—
		901.1	Gamma (pCi/l)	None detected		—
	08/08/03	906.0	Tritium (pCi/l)	-33.7 U +/- 110	17.1 U +/- 49.0	—
	11/14/03	906.0	Tritium (pCi/l)	-82.5 U +/- 110	-8.74 U +/- 46.3	—
RD-61	12/03/03	8260B	VOCs	None detected		—
RD-68B	12/04/03	8260B	VOCs	None detected		—
HAR-07	04/16/03	8260SIM	1,4-Dioxane	0.07 U	0.54 U	—
		1625M	N-Nitrosodimethylamine	0.055	0.054	2
HAR-14	04/15/03	8260SIM	1,4-Dioxane	160	94	52
WS-04A	02/19/03	8260B	Acetone	6.5 J	3 U	—
	12/03/03	8260B	Toluene	0.64 J	0.46 J	NA
WS-05	05/05/03	8260SIM	1,4-Dioxane	2.38	2.6 U	—
WS-09A	12/03/03	8260B	cis-1,2-Dichloroethene	690	530	26
			trans-1,2-Dichloroethene	18 J	12	NA
			Trichloroethene	2000	1300	42
OS-08	12/09/03	314.0	Perchlorate	0.8 U	0.35 U	—
OS-09	07/02/03	314.0	Perchlorate	0.8 U	0.35 U	—
	07/10/03	314.0	Perchlorate	0.8 U	0.35 U	—
			Perchlorate	0.8 U	0.35 U (*)	—
			Perchlorate	0.8 U	0.35 U (*)	—
	07/17/03	314.0	Perchlorate	0.8 UJ	0.35	—
			Perchlorate	0.8 UJ	0.35 U (*)	—
	07/24/03	314.0	Perchlorate	0.8 U	0.35 U	—
			Perchlorate	0.8 U	0.35 U (*)	—
	07/31/03	314.0	Perchlorate	0.8 U	0.35 U	—
			Perchlorate	0.8 U	0.35 U (*)	—
			Perchlorate	0.8 U	2 UJ	—
			Perchlorate	0.8 U	2 UJ (**)	—
	08/07/03	314.0	Perchlorate	0.8 UJ	0.35 U	—
			Perchlorate	0.8 UJ	0.35 U (*)	—
	08/12/03	314.0	Perchlorate	0.8 U	0.35 U	—
			Perchlorate	0.8 U	0.35 U (*)	—

TABLE D-I
SUMMARY OF 2003 SPLIT RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Primary Sample Result (ug/l)	Split Sample Result (ug/l)	RPD
OS-09	08/21/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	08/28/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	09/04/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	09/11/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	09/18/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	09/25/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	10/02/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	11/06/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
		8260B	VOCs	None detected		
	11/13/03	314.0	Perchlorate	0.8 U	0.35 U	---
			Perchlorate	0.8 U	0.35 U (*)	---
	12/04/03	314.0	Perchlorate	0.8 U	0.35 U	---
OS-10	12/09/03	314.0	Perchlorate	0.8 U	0.35 U	---
OS-21	12/02/03	314.0	Perchlorate	0.8 U	0.35 U	---
OS-28	08/22/03	1625M	N-Nitrosodimethylamine	0.012 R	0.002 U	---
			N-Nitrosodimethylamine	0.0007 U	0.002 U (*)	---
	12/16/03	1625M	N-Nitrosodimethylamine	0.0036	0.0047	NA

TABLE D-1
FOOTNOTES AND EXPLANATIONS

8260B	=	EPA method 8260B for volatile organic compounds.
8260SIM	=	EPA method 8260SIM for 1,4-dioxane.
314.0	=	EPA method 314.0 for perchlorate.
1625M	=	EPA method 1625M for n-Nitrosodimethylamine.
pCi/l	=	Pico Curies per liter.
ug/l	=	Micrograms per liter.
RPD	=	Relative percent difference. RPDs were calculated only if the detected concentration exceeded the product of five times the method detection limit times the dilution factor.
NA	=	Not applicable. An RPD calculation is not valid since at least one of the laboratories reported a detected concentration less than the product of five times the method detection limit times the dilution factor.
(---)	=	Not applicable. Constituent detected in only one sample.
Primary lab	=	Del Mar Analytical of Irvine, California. For 1,4-dioxane, Ceimic Corporation of Narragansett, Rhode Island served as the primary lab.
Split lab	=	American Analytics of Chatsworth, California. For 1,4-dioxane, Del Mar Analytical of Irvine, California served as the split lab.
(*)	=	Duplicate sample analyzed by the split laboratory. The split lab was Ceimic Corp. of Narragansett, Rhode Island for perchlorate for OS-09 and Weck Laboratories of City of Industry, California for NDMA for OS-28.
(**)	=	Duplicate sample analyzed by the split laboratory for Perchlorate in OS-09. The split lab was American Analytics of Chatsworth, California.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
F	=	Sampled through multi-level FLUTe ports. Footnoted results are not representative of historic groundwater samples, and may have been introduced in the FLUTe samples by compressed nitrogen gas, electrical tape and/or FLUTe components.
L	=	Laboratory contaminant.
R	=	The analyte result was rejected; presence or absence of the analyte cannot be verified.
S	=	Suspect result.
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
UJ	=	Not detected. Estimated detection limit as a result of quality control recoveries exceeding the acceptance limit range.

TABLE D-II
SUMMARY OF 2003 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FILED LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Primary Sample Result (ug/l)	Duplicate Sample Result (ug/l)	RPD
Shallow Wells						
RS-10	02/26/03	8260B	None Detected			
RS-13	02/21/03	8260B	Chloromethane	0.14 J	0.14 U	---
RS-11	05/01/03	8260B	VOCs	None detected		
RS-25	03/28/03	314.0	Perchlorate	0.8 U	0.8 U	---
	05/01/03	314.0	Perchlorate	Not detected		
SH-11	08/25/03	8260B	cis-1,2-Dichloroethene	0.59 J	0.63 J	NA
HAR-15	12/03/03	8260B	Acetone	4.5 U	4.6 J	---
Chatsworth Formation Wells						
RD-02	08/11/03	8260SIM	1,4-Dioxane	1.52	1.64	8
	11/19/03	8260B	1,1-Dichloroethene	1.5	1.8 J	NA
			cis-1,2-Dichloroethene	440	450	2
			trans-1,2-dichloroethene	25	26	NA
			Trichloroethene	280	290	4
			Vinyl chloride	7.2	6.9	NA
RD-03	02/18/03	8260B	cis-1,2-Dichloroethene	1	1.1	NA
RD-05B	05/09/03	8260B	Trichloroethene	0.48 J	0.6 J	NA
	11/10/03	8260B	VOCs	None detected		
RD-13	02/07/03	8260B	Trichloroethene	1.4	1.3	7
RD-19	05/06/03	8260B	VOCs	None detected		
RD-21(Z2)	11/17/03	8260B	1,1-Dichloroethene	0.32 J	0.32 U	---
			Benzene	0.28 J,F	0.28 U	---
			Carbon tetrachloride	7.3	8.1	10
			Chloroform	3.2	3	6
			cis-1,2-Dichloroethene	170	150	13
			Toluene	5 F	4.4 F	13
			trans-1,2-dichloroethene	4.4	0.93 J	NA
			Trichloroethene	69	70	1
RD-22(Z2)	04/30/03	8260B	Acetone	8.7 J,F	16 F	NA
			Benzene	0.56 F	0.9 F	NA
			Chlorobenzene	0.36 U	0.42 J, F	---
			Toluene	1.9 F	0.9 J,F	NA
RD-26	08/21/03	8260B	Chloroform	0.33 U	0.36 J,S	---
			Trichloroethene	5.9	6	2
RD-33A(Z4)	01/30/03	8260B	Benzene	1 F	1 F	NA
			Methylene Chloride	3.0 U	12 L	---
			Toluene	35 F	31 F	12
			Trichloroethene	0.66 J	0.53 J	NA
RD-34C	11/13/03	8260B	VOCs	None detected		
RD-40	05/08/03	8260B	Acetone	8.4 J,L	6.6 J,L	NA
RD-43B	08/13/03	8260B	VOCs	None detected		
RD-44	02/04/03	8260SIM	1,4 Dioxane	0.07 U	0.07 U	---
RD-48B	02/18/03	8260B	Acetone	5.7 J,L	5.3 J,L	NA
	09/03/03	8260B	VOCs	None detected		
RD-49A	02/04/03	8260B	cis-1,2-Dichloroethene	2000	2200	10
			trans-1,2-Dichloroethene	46	51	10
			Methylene Chloride	20 J,L	13 J,L	NA
			Trichloroethene	4100	4400	7
RD-49B	11/17/03	8260SIM	1,4-Dioxane	2.3	1.8 U	---
RD-49C	11/18/03	8260SIM	1,4-Dioxane	0.6 U	0.74 U	---
RD-52C	05/14/03	8260B	VOCs	None detected		
RD-54B	08/07/03	8260B	VOCs	None detected		

TABLE D-II
SUMMARY OF 2003 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FILED LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Primary Sample Result (ug/l)	Duplicate Sample Result (ug/l)	RPD
RD-55A	02/13/03	8260B	Chloromethane	0.37 J	0.19 J	NA
			cis-1,2-Dichloroethene	84	84	0
			trans-1,2-Dichloroethene	3	2.7	11
			Trichloroethene	83	82	1
			Vinyl chloride	5.4	5.2	4
	05/05/03	8260B	cis-1,2-Dichloroethene	27	20	30
			trans-1,2-Dichloroethene	1.4	0.94 J	NA
			Trichloroethene	25	20	22
			Vinyl Chloride	6.4	4.4	37
	08/18/03	8260B	Chloroform	1.8 J,S	2 J,S	NA
			cis-1,2-Dichloroethene	560	550	2
			Methylene chloride	14 J,L	13 J,L	7
			trans-1,2-Dichloroethene	30	30	0
			Trichloroethene	490	470	4
RD-55B	05/06/03	8260B	Vinyl Chloride	73	71	3
			cis-1,2-Dichloroethene	9.5	6.2	42
			Trichloroethene	13	8.6	41
	08/22/03	8260B	cis-1,2-Dichloroethene	9.5	9.5	0
			Trichloroethene	12	12	0
RD-56B	11/11/03	8260B	TCE	0.35 J	0.36 J	NA
RD-61	12/03/03	8260B	VOCs	None detected		
RD-66	05/08/03	8260B	VOCs	None detected		
HAR-07	04/16/03	1625M	N-Nitrosodimethylamine	0.055	0.051	8
HAR-17	04/16/03	8260B	Acetone	4.6 J	4.5 U	—
			1,1-Dichloroethane	0.49 J	0.44 J	NA
			1,1-Dichloroethene	1.6 J	1.9 J	17
			cis-1,2-Dichloroethene	20	18	11
			trans-1,2-Dichloroethene	1.7 J	1.1 J	NA
			Trichloroethene	93 J	83	11
HAR-26	05/15/03	8260B	VOCs	None detected		
WS-04A	02/19/03	8260B	Acetone	6.5 J,L	4.7 J,L	NA
	05/09/03	8260B	VOCs	None detected		
	12/03/03	8260B	Toluene	0.64 J	0.64 J	NA
WS-09A	12/03/03	8260B	cis-1,2-Dichloroethene	690	700	1
			trans-1,2-dichloroethene	18 J	18 J	NA
			Trichloroethene	2000	2000	0
OS-09	07/10/03	314.0	Perchlorate	0.8 U	0.8 U	—
	07/10/03		Perchlorate	0.8 U	0.35 U (*)	—
	07/17/03		Perchlorate	0.8 UJ	0.8 UJ	—
	07/17/03		Perchlorate	0.8 UJ	0.35 U (*)	—
	07/24/03		Perchlorate	0.8 U	0.8 UJ	—
	07/24/03		Perchlorate	0.8 U	0.35 U (*)	—
	07/31/03		Perchlorate	0.8 U	0.8 U	—
	07/31/03		Perchlorate	0.8 U	0.35 U (*)	—
	07/31/03		Perchlorate	0.8 U	2 UJ (**)	—
	08/07/03		Perchlorate	0.8 UJ	0.8 UJ	—
	08/07/03		Perchlorate	0.8 UJ	0.35 U (*)	—
	08/12/03		Perchlorate	0.8 U	0.8 U	—
	08/12/03		Perchlorate	0.8 U	0.35 U (*)	—
	08/21/03		Perchlorate	0.8 U	0.8 U	—
	08/21/03		Perchlorate	0.8 U	0.35 U (*)	—
	08/28/03		Perchlorate	0.8 U	0.8 U	—
	08/28/03		Perchlorate	0.8 U	0.35 U (*)	—

See last page of Table D-II for footnotes and explanations.

Haley & Aldrich, Inc.

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27-February-2004

TABLE D-II
SUMMARY OF 2003 DUPLICATE SAMPLE RESULTS
BOEING SANTA SUSANA FILED LABORATORY
VENTURA COUNTY, CALIFORNIA

Well ID	Date	Method	Constituent	Primary Sample Result (ug/l)	Duplicate Sample Result (ug/l)	RPD	
OS-09	09/04/03	314.0	Perchlorate	0.8 U	0.8 U	---	
	09/04/03		Perchlorate	0.8 U	0.35 U (*)	---	
	09/11/03		Perchlorate	0.8 U	0.8 U	---	
	09/11/03		Perchlorate	0.8 U	0.35 U (*)	---	
	09/18/03		Perchlorate	0.8 U	0.8 U	---	
	09/18/03		Perchlorate	0.8 U	0.35 U (*)	---	
	09/25/03		Perchlorate	0.8 U	0.8 U	---	
	09/25/03		Perchlorate	0.8 U	0.35 U (*)	---	
	10/02/03		Perchlorate	0.8 U	0.8 U	---	
	10/02/03		Perchlorate	0.8 U	0.35 U (*)	---	
	11/06/03		Perchlorate	0.8 U	0.8 U	---	
	11/06/03		Perchlorate	0.8 U	0.35 U (*)	---	
	11/13/03		Perchlorate	0.8 U	0.8 U	---	
	11/13/03		Perchlorate	0.8 U	0.35 U (*)	---	
	11/06/03	8260B	VOCs	None detected			
OS-26	02/04/03	8260B	None Detected				
OS-28	08/22/03	8260B	VOCs	None detected			
		8260SIM	1,4-Dioxane	0.07 U	0.07 U	---	
		6010B	Calcium (mg/l)	110	110	0	
		6010B	Magnesium (mg/l)	58	58	0	
		6010B	Potassium (mg/l)	4.6	4.9	6	
		6010B	Sodium (mg/l)	66	65	2	
		SM2320B	Bicarbonate (mg/l)	415	402	3	
		300.0	Chloride (mg/l)	38	38	0	
		300.0	Fluoride (mg/l)	0.53	0.5	6	
		300.0	Sulfate (mg/l)	250	250	0	
		160.1	Total Dissolved Solids (mg/l)	770	790	3	
		150.1	pH (pH units)	7.29	7.26	NA	
		120.1	Specific Conductance (umhos/cm)	1200	1200	0	
		SM2320B/300.0	Carbonate, Nitrate-N	None detected			
		09/18/03	1625M	N-Nitrosodimethylamine	0.0057 R	0.006 J	---
			1625M	N-Nitrosodimethylamine	0.0057 R	0.0028 U	---
		12/16/03	1625M	N-Nitrosodimethylamine	0.002	0.0036	NA

TABLE D-II
FOOTNOTES AND EXPLANATIONS

8260B	=	EPA method 8260B for volatile organic compounds.
8260SIM	=	EPA method 8260SIM for 1,4-dioxane.
300.0	=	EPA method 300.0 for chloride, fluoride, sulfate, and nitrate.
314.0	=	EPA method 314.0 for perchlorate.
1625M	=	EPA method 1625M for n-Nitrosodimethylamine.
6010B	=	EPA method 6010B for metals.
SM2320B	=	EPA method SM2320B for bicarbonate and carbonate.
120.1	=	EPA method 120.1 for specific conductance.
150.1	=	EPA method 150.1 for pH.
160.1	=	EPA method 160.1 for total dissolved solids.
mg/l	=	Milligrams per liter.
ug/l	=	Micrograms per liter.
umhos/cm	=	Micromhos per centimeter.
RPD	=	Relative percent difference. RPDs were calculated only if the detected concentration exceeded the product of five times the method detection limit times the dilution factor.
NA	=	Not applicable. An RPD calculation is not valid since at least one of the laboratories reported a detected concentration less than the product of five times the method detection limit times the dilution factor.
(--)	=	Not applicable. Constituent not detected in one or both samples.
J	=	Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
F	=	Sampled through multi-level FLUTe ports. Footnoted results are not representative of historic groundwater samples, and may have been introduced in the FLUTe samples by compressed nitrogen gas, electrical tape and/or FLUTe components.
L	=	Laboratory contaminant.
R	=	Rejected.
S	=	Suspect result.
U	=	Not detected; numerical value represents the Method Detection Limit for that compound.
Primary and duplicate samples were analyzed by Del Mar Analytical unless otherwise noted.		
(*)	=	Duplicate samples analyzed by the split laboratory. The split lab used was Ceimic Corp. of Narrangansett, Rhode Island for perchlorate for OS-09 and Weck Laboratories of City of Industry, California for NDMA for OS-28.
(**)	=	Duplicate samples analyzed by the split laboratory for perchlorate in OS-09. The split lab used was American Analytics of Chatsworth, California.

TABLE D-III
SUMMARY OF 2003 DATA QUALIFICATION OF NON-APPENDIX IX SAMPLES DUE TO BLANK SAMPLE CONTAMINATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Date Sampled	Target Compound(s) Detected in the Blank	Concentration (ug/l)	Flag Associated Field Sample results with a "U" if less than or equal to this value (ug/l)	Affected Field Samples
<i>Volatile Organic Compounds</i>						
OS-26_020403_05	Trip blank	02/04/03	Methylene chloride	0.61	6.1	OS-26 (dup), RD-58C_020303_04
RD-03_021803_05	Trip blank	02/18/03	Methylene chloride	0.5	5	RD-48C, RD-67_021903_04
RD-05C_013103_04	Field blank	01/31/03	Methylene chloride	5.9	59	RD-05C
RD-05C_013103_05	Trip blank	01/31/03	Methylene chloride	4	40	OS-08, RD-05C_013103_04, RD-05A, RD-05B, RD-58B
RD-33A(Z4)_013003_05	Trip blank	01/30/03	Methylene chloride	0.94	9.4	RD-33A(Z4), OS-16
RD-36B_021203_05	Trip blank	02/12/03	Acetone	6.1	61	HAR-27, RD-36C, RD-55A, RD-55A (dup)
RD-37_021703_04	Field blank	02/17/03	Acetone	6.3	63	RD-37_021703_01
RD-37_021703_04	Field blank	02/17/03	Chloromethane	0.43	2.2	RD-37_021703_01
RD-43B_021103_05	Trip blank	02/11/03	Methylene chloride	0.5	5	RD-43B_021103_04, RD-52B_021103_04
RD-48B_021803_05	Trip blank	02/18/03	Methylene chloride	0.81	8.1	RD-37_021703_04, RD-03_021803_04
RD-67_021903_04	Field blank	02/19/03	Acetone	15	150	RD-67
3E10008-BLK1	Method Blank	2nd Qtr	1,4-Dioxane	1.29 J	5.45	WS-05 (split)
RD-19_050603_04	Field blank	05/06/03	Acetone	6.4 J	64	RD-19 (primary & dup)
RD-57(Z8)_043003_04	Field blank	04/30/03	Acetone	7.4 J	74	RD-57(Z8)
RD-62_050203_04	Field blank	05/02/03	Acetone	6.9 J	69	RD-62
3E11006-BLK1	Method Blank	2nd Qtr	1,4-Dioxane	1.59 J	7.95	RD-20(A)_050503_06 (spike)
3E15018-BLK1	Method Blank	2nd Qtr	Methylene Chloride	0.330 J	3.3	RD-49B_050603_05 (trip blank)
3E14016-BLK1	Method Blank	2nd Qtr	1,4-Dioxane	0.620 J	3.1	RD-04 (split), RD-49A (split), RD-49B (split)
RD-02_050503_05	Trip blank	05/05/03	1,4-Dioxane	0.086 J	0.43	RD-04, RD-44
V170508-B1	Method Blank	2nd Qtr	1,4-Dioxane	0.13 J	0.65	RD-04, RD-44, RD-02_050503_05 (trip blank)
V170825-B1	Method blank	3rd Qtr	1,4-Dioxane	0.18	0.9	RD-49C, RD-04, WS-06, WS-13
3H11016-BLK1	Method blank	3rd Qtr	Methylene chloride	0.480 J	4.8	RD-68A (field blank)
3H14024-BLK1	Method blank	3rd Qtr	Methylene chloride	0.8 B,J	8	RD-56B, RD-44 (field blank), RD-52C (field blank)
RD-52C_081203_04	Field blank	08/12/03	Acetone	5.3 J	53	RD-52C
RD-52C_081203_05	Trip blank	08/12/03	Acetone	12	120	RD-52C
VBLKQR	Method blank	3rd Qtr	1,4-Dioxane	0.180 J	0.9	WS-12
3H14024-BLK1	Method blank	3rd Qtr	Methylene chloride	0.8 J	8	WS-12, WS-12 (trip blank)
WS-12_081303_05	Trip blank	08/13/03	Methylene chloride	0.59 J	5.9	WS-12
HAR-22_082103_05	Trip blank	08/21/03	Acetone	9.1	91	HAR-22, RD-26, RD-26 (dup), RD-48C
RD-55B_082203_04	Field blank	08/22/03	Methylene chloride	0.69	6.9	RD-55B, RD-55B (dup)
RD-55B_082203_05	Trip blank	08/22/03	Methylene chloride	1.2	12	OS-28 & OS-28 (dup) (08/22/03), RD-55B, RD-55B (dup)
3I03005-BLK1	Method blank	3rd Qtr	Acetone	6.48	64.8	ES-26
RD-60_082603_05	Trip blank	08/26/03	Acetone	8.2	82	HAR-11
3I03005-BLK1	Method blank	3rd Qtr	Acetone	6.48	64.8	HAR-11, RD-60, RD-60 (trip blank)
RD-33A(Z2)_082703_04	Field blank	08/27/03	Toluene	1.8	9	RD-33A(Z2)
RD-07(Z13)_082803_05	Trip blank	08/28/03	Acetone	14	140	RD-33A(Z2), RD-57(Z8)
RD-48C_112103_05	Trip blank	11/21/03	Acetone	6.8 J	68	RD-62
RD-56B_111103_04	Field blank	11/11/03	Methylene chloride	0.86 J	8.6	RD-56B, RD-56B (dup)
RD-22(Z2)_111703_05	Trip blank	11/17/03	Carbon disulfide	0.49 J	2.45	RD-21(Z2) (primary)
RD-22(Z2)_111703_05	Trip blank	11/17/03	Trichloroethene	1.0	5.0	RD-22(Z2), RD-22(Z2) (field blank)
RD-18_111903_05	Trip blank	11/19/03	Methylene chloride	2.5 J	25	RD-18 (field blank)
VBLKQI	Method blank	4th Qtr	1,4-Dioxane	0.36 J	1.8	RD-02, WS-06, RD-49A, RD-49B (dup), RD-49C, RD-49C (dup)

TABLE D-III
SUMMARY OF 2003 DATA QUALIFICATION OF NON-APPENDIX IX SAMPLES DUE TO BLANK SAMPLE CONTAMINATION
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Blank Sample Identification	Blank Sample Type	Date Sampled	Target Compound(s) Detected in the Blank	Concentration (ug/l)	Flag Associated Field Sample results with a "U" if less than or equal to this value (ug/l)	Affected Field Samples
Trace Metals						
3B05044-BLK1	Method blank	1st Qtr	Antimony	0.047	0.47	RD-59B
3B05044-BLK1	Method blank	1st Qtr	Chromium	0.245	2.45	RD-59A
3B11070-BLK1	Method blank	1st Qtr	Chromium	0.396	3.96	RD-34B, RD-34C
3B12071-BLK1	Method blank	1st Qtr	Vanadium	0.886	8.86	RD-33B, RD-33C
3B24067-BLK1	Method blank	1st Qtr	Iron	4.34	43.4	RD-54A(Z2)
3C04048-BLK1	Method blank	1st Qtr	Chromium	0.745	7.45	RD-21(Z2), RD-22(Z2)
3C06075-BLK1	Method blank	1st Qtr	Antimony	0.092	0.92	RD-15, RD-23(Z1), RD-54B, RD-54C
3C06075-BLK1	Method blank	1st Qtr	Chromium	0.35	3.5	RD-15, RD-23(Z1), RD-54B, RD-54C
3C06075-BLK1	Method blank	1st Qtr	Iron	5.05	50.5	RD-23(Z1)
3E07049-BLK1	Method Blank	2nd Qtr	Arsenic	0.309 J	3.09	RS-18, RD-57(Z8)
3I12082-BLK1	Method blank	3rd Qtr	Potassium (mg/l)	0.198	1.98	OS-09 (9/11/03)
3H22074-BLK1	Method blank	3rd Qtr	Iron (total)	0.0218	0.218	OS-09 (8/21/03)
3H12064-BLK1	Method blank	3rd Qtr	Antimony	0.548 J	5.48	RD-54B, RD-59A, RD-59B, RD-59C
3H12064-BLK1	Method blank	3rd Qtr	Chromium	0.999 J	9.99	RD-54B, RD-59A, RD-59B, RD-59C
3H27042-BLK1	Method blank	3rd Qtr	Chromium	0.283	2.83	OS-28 (08/22/03)
3H27042-BLK1	Method blank	3rd Qtr	Copper	1.01	10.1	OS-28 (08/22/03)
3I08050-BLK1	Method blank	3rd Qtr	Chromium	0.266	2.66	RD-21(Z2)
3I02088-BLK1	Method blank	3rd Qtr	Chromium	0.374	3.74	RD-23(Z1), RD-54C, RD-54A
3I02088-BLK1	Method blank	3rd Qtr	Iron	3.94	39.4	RD-23(Z1), RD-54A
3K21100-BLK1	Method blank	4th Qtr	Iron (total)	0.0126 J	0.126	RD-59A
3L24039-BLK1	Method Blank	4th Qtr	Iron (total)	0.0132 J	0.132	OS-09 (12/23/03)
Volatile Fuel Hydrocarbons						
3B14006-BLK1	Method blank	1st Qtr	Volatile Fuel Hydrocarbons	17.2	86	RD-36B
3B18002-BLK1	Method blank	1st Qtr	Volatile Fuel Hydrocarbons	9.68	48.4	RD-36C, RD-38B
3B20008-BLK1	Method blank	1st Qtr	Volatile Fuel Hydrocarbons	19.4	97	RD-37, RD-38A
3B23001-BLK1	Method blank	1st Qtr	Volatile Fuel Hydrocarbons	21.7	108.5	RD-32
3B26003-BLK1	Method blank	1st Qtr	Volatile Fuel Hydrocarbons	10.9	54.5	RS-32
3B28001-BLK1	Method blank	1st Qtr	Volatile Fuel Hydrocarbons	15.8	79	HAR-11
3E05001-BLK1	Method Blank	3rd Qtr	Volatile Fuel Hydrocarbons(C6-C12)	14.3	71.5	RS-31
Semi-Volatile Organic Compounds						
3H22065-BLK1	Method blank	3rd Qtr	N-Nitrosodimethylamine	0.0014 J	0.007	RD-04, WS-06, WS-13
W309595-BLK1	Method blank	3rd Qtr	N-Nitrosodimethylamine	0.000816	0.00408	OS-28 (09/18/03)
General Minerals						
C3K2107-BLK1	Method blank	11/20/03	Formaldehyde	30.1 J	150.5	RD-04

EXPLANATION:

mg/l = Milligrams per liter.

ug/l = Micrograms per liter.

Z = FLUTE sample port number.

Primary = Primary sample.

Dup = Field duplicate.

Split = Sample split.

J = Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).

U = Not detected; numerical value represents the Method Detection Limit for that compound.

TABLE D-IV

SUMMARY OF 2003 DATA QUALIFICATION OF NON-APPENDIX IX SAMPLES DUE TO LCS/LCSD, MS/MSD RECOVERY EXCEEDANCE
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

LCS/LCSD, MS/MSD Sample Identification	Sample Type	Date sampled	Target Compound(s) Outside of Recovery Limits	% Recovery Criteria	% Recovery	Affected Field Samples	Qualification: If % Recovery is less than the lower acceptance limit, the associated target analyte is qualified "J" for positive results and "R" for non-detects. If % Recovery is greater than the upper acceptance limit, the associated target analyte is qualified "J" for positive results and not qualified for non- detects.
Semi-Volatile Organic Compounds							
3E02041-BS1	LCS	04/30/03	Benzidine	15 - 180	<15	RD-10(Comp)	R
3H17026-BS1	LCS	08/11/03	Benzidine	15 - 180	<15	RD-44, RD-49A, RD-49B, RD-02	R
3H21079-BS1	LCS	8/20/03, 8/19/03	Benzidine	15 - 180	<15	RD-04, WS-06	R
3H25065-BS1	LCS	8/20/03, 8/22/03	Benzidine	15 - 180	6	WS-13, OS-28	R
3K17036-BS1	LCS	11/17/03	Benzidine	15 - 180	<15	RD-49B	R
Volatile Organic Compounds							
3K26007-MS1	MS	11/18/03	Cis-1,2-Dichloroethene	60 - 113	59	RD-49A, RD-49C	J

EXPLANATION:

LCS = Laboratory control standard.

LCSD = Laboratory control standard duplicate.

MS = Matrix spike.

MSD = Matrix spike duplicate.

J = Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the method detection limit.

R = The analyte result was rejected; presence or absence of the analyte cannot be verified.

Comp = Composite sample. The RD-10 sample was composited at the laboratory from FLUTE ports 3, 6, and 9.

TABLE D-V

SUMMARY OF 2003 DATA QUALIFICATION OF NON-APPENDIX IX SAMPLES DUE TO CALIBRATION VERIFICATION RECOVERY EXCEEDANCE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Target Compound(s)	Batch	Date Sampled	Calibration Verification Recovery Above Method Control Limit?	Affected Field Samples	If calibration verification % recovery is greater than the upper acceptance limit, qualify associated target analyte positive results as "J" and non-detects as "UJ".
<i>Semi-Volatile Organic Compounds</i>					
Diethyl phthalate	3E02041	04/30/03	Yes	RD-10(Comp)	UJ
	3E07066	05/06/03	Yes	RD-49B	UJ
	3E07066	05/06/03	Yes	RD-44	UJ
	3E07066	05/05/03	Yes	RD-02	UJ
	3E07066	05/05/03	Yes	WS-05	UJ
Bis(2-chloroisopropyl)ether	3K20044	11/19/03	Yes	RD-02	UJ
	3K24056	11/20/03	Yes	RD-04	UJ
	3K20044	11/18/03	Yes	RD-49A	UJ
	3K20044	11/18/03	Yes	RD-49C	UJ
	3K20044	11/19/03	Yes	WS-06	UJ
<i>Volatile Organic Compounds</i>					
Bromoform	3K26007	11/18/03	Yes	RD-49A	UJ
	3K26007	11/18/03	Yes	RD-49C	UJ
Trichlorotrifluoroethane (Freon 113)	3K26007	11/18/03	Yes	RD-49A	UJ
	3K26007	11/18/03	Yes	RD-49C	UJ

EXPLANATION:

UJ = Not detected. Estimated detection limit as a result of quality control recoveries.
exceeding the acceptance limit range.

Comp = Composite sample. The RD-10 sample was composited at the laboratory from FLUTe ports 3, 6, and 9.

TABLE D-VI

SUMMARY OF 2003 DATA QUALIFICATION OF NON-APPENDIX IX SAMPLES DUE TO CONTINUING CALIBRATION VERIFICATION EXCEEDANCE
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Target Compound(s)	Batch	CCV Below Method Control Limit of 50%?	Affected Field Samples	If Continuous Calibration Verification is less than 50 % of Initial Instrument Calibration (ICAL), then the result is qualified "R"
<i>Semi-Volatile Organic Compounds</i>				
N-Nitrosodimethylamine	3H26087	Yes	OS-28 (08/22/03)	R

EXPLANATION:

R = Rejected

CCV = Continuing Calibration Verification

TABLE D-VII

SUMMARY OF DATA QUALIFICATION OF SAMPLES BY AMEC
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Page 1 of 1

Sample	Sample Date	Sample Type	Analyte	Data Validation Issues	Qualified Perchlorate Result (ug/l)	Lab
OS-09	07/17/03	Primary	Perchlorate	CCV exceeded limits	0.8 UJ	DMA
	07/17/03	Duplicate	Perchlorate	CCV exceeded limits	0.8 UJ	DMA
	07/17/03	Field blank	Perchlorate	CCV exceeded limits	0.8 UJ	DMA
OS-09_071703_06M1	07/17/03	5 ug/l Matrix spike	Perchlorate	CCV exceeded limits	4.8 J	DMA
OS-09_071703_06MD1	07/17/03	5 ug/l Matrix spike duplicate	Perchlorate	CCV exceeded limits	4.3 J	DMA
OS-09_071703_06N1	07/17/03	Reagent blank	Perchlorate	CCV exceeded limits	0.8 UJ	DMA
OS-09	07/24/03	Duplicate	Perchlorate	CCV exceeded limits	0.8 UJ	DMA
	07/31/03	Split	Perchlorate	CCV exceeded limits	2 UJ	Ceimic
	07/31/03	Split Sample Dup	Perchlorate	CCV exceeded limits	2 UJ	AMA
OS-28	08/07/03	Primary	Perchlorate	Recoveries for confirmation spikes exceeded limits	0.8 UJ	DMA
	08/07/03	Duplicate	Perchlorate	Recoveries for confirmation spikes exceeded limits	0.8 UJ	DMA
	09/18/03	Primary	N-Nitrosodimethylamine	Lab spike deficiency	0.0057 R	Weck

EXPLANATION:

AMEC = AMEC Earth & Environmental of Lakewood, Colorado.

CCV = Continuing Calibration Verification.

J = Estimated value. Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the method detection limit.

R = Result rejected.

UJ = Not detected. Estimated detection limit as a result of calibration verification recovery or confirmation spike recoveries were below the acceptance limits.

AMA = American Analytics of Chatsworth, California.

DMA = Del Mar Analytical of Irvine, California.

Ceimic = Ceimic Corporation of Narragansett, Rhode Island.

Weck = Weck Laboratories of City of Industry, California.

Primary = Primary sample.

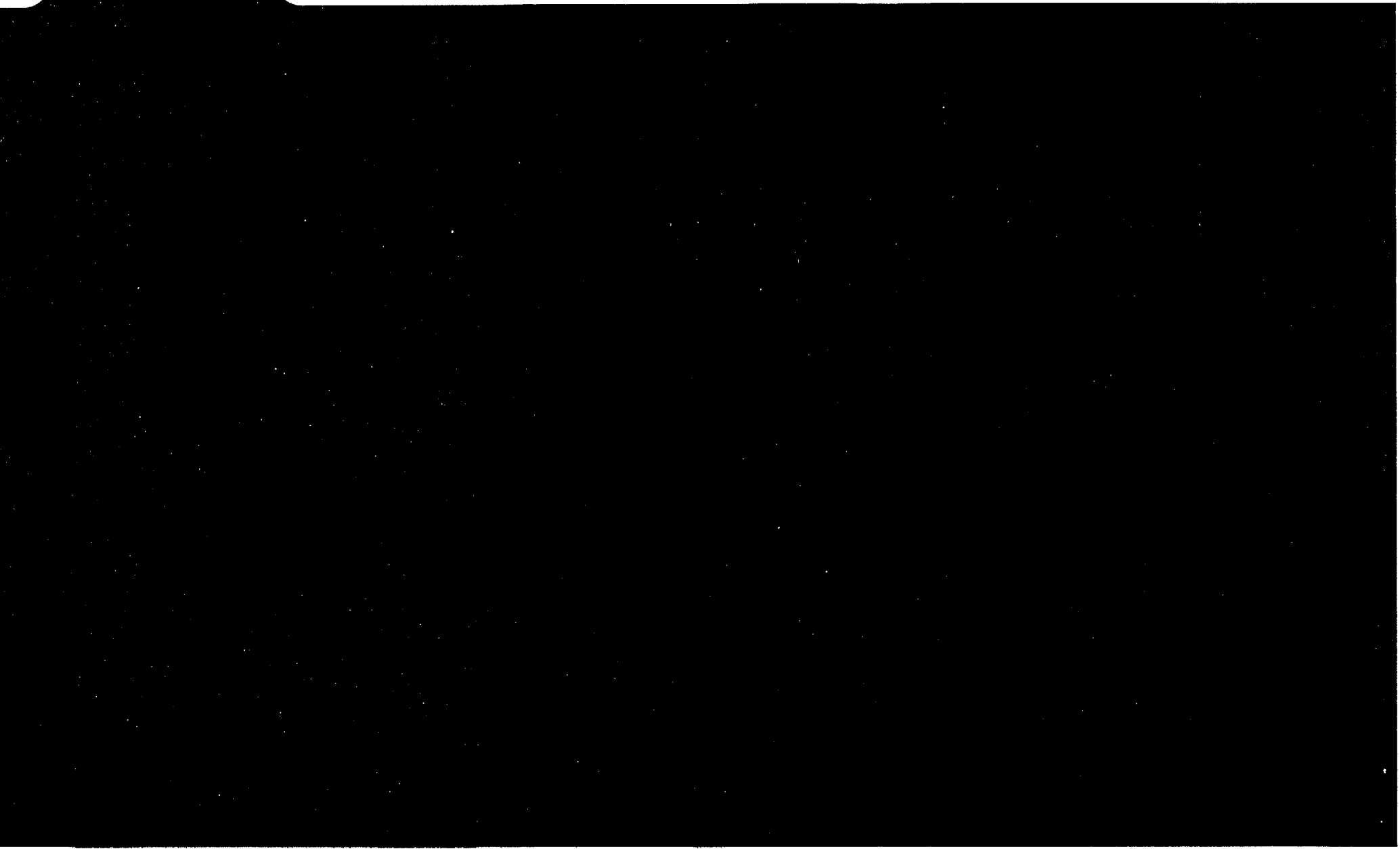
Duplicate = Sample duplicate.

Split = Sample split.

Split Sample Dup = Duplicate sample analyzed by the split laboratory.

ug/l = Micrograms per liter.

Appendix E



APPENDIX E

Results of Radiological Analyses

APPENDIX E
RESULTS OF RADIOLOGICAL ANALYSES

TABLE OF CONTENTS

TABLE NO. TITLE

E-I	RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
E-II	RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
E-III	RESULTS OF ANALYSES FOR MAN-MADE, GAMMA-EMITTING RADIONUCLIDES IN GROUNDWATER SAMPLES
E-IV	RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES

APPENDIX E

RESULTS OF RADIOLOGICAL ANALYSES

This appendix contains a compilation of all radiochemistry data obtained during the quarterly groundwater monitoring program and new well construction activities. Table E-I presents the results for gross alpha and gross beta analyses. Table E-II presents the results for tritium and Table E-III presents the results for man-made gamma-emitting radionuclides. Table E-IV presents the results for other specific isotopes, including uranium, thorium, radium, lead, plutonium, polonium, and technetium.

The results are generally presented as the activity detected within an overall error range (\pm). Any activity detected is reported by the laboratory. Analytical results that are less than the instrument background count are shown as negative values. Some results may also be presented as less than ($<$) the detection limit.

The text describes a result as non-detectable if it is less than the minimum detectable activity (MDA), less than the overall laboratory error, or the sample count is less than the instrument background count. In each of these cases, radioactivity is not considered to be present at detectable concentrations. In Table E-III, the gamma results are presented as non-detectable if the reported activity was less than the MDA. Only man-made radionuclides (e.g., cobalt-57, cobalt-60, cesium-134 and cesium-137) are specifically included in Table E-III. Naturally occurring radionuclides such as bismuth-214, lead-214, thallium-208 and lead-212 have exhibited activities above their respective MDAs occasionally. These uranium and thorium daughter products are discussed in the quarterly reports, but are not considered to be indicative of man-made radioactivity. As such, they are not included in Table E-III.

TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
Shallow Wells							
ECL French-drain	Primary	12/12/91	5.73 ± 4.46	8.37 ± 3.08	Filtered		IT
SH-04	Primary	06/03/89	4.8 ± 6.9	6.8 ± 3.2	Unfiltered		BC
SH-04	Primary	07/22/89	4.0 ± 1.0	19.2 ± 2.4	Unfiltered, Decanted		BC
SH-04	Primary	09/09/89	8.0 ± 4.4	10.0 ± 1.3	Unfiltered		BC
SH-04	Primary	09/09/89	22.0 ± 5.4	13.0 ± 1.3	Filtered		BC
SH-04	Primary	03/18/93	7 ± 6	<3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
SH-04	Primary	06/09/93	5 ± 4	8 ± 4	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
SH-04	Primary	08/09/93	5 ± 4	<3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
SH-04	Primary	11/04/93	1.1 ± 5.2	2.9 ± 6.5	Filtered		LAS
SH-04	Primary	05/06/94	3.5 ± 5.7	4.5 ± 6.7	Filtered		LAS
SH-07	Primary	06/03/89	185 ± 18.3	21.2 ± 3.1	Unfiltered		BC
SH-07	Primary	07/19/89	30.5 ± 3.3	21.2 ± 0.9	Unfiltered, Decanted		BC
SH-07	Primary	07/19/89	8.4 ± 2.0	3.8 ± 0.6	Filtered		BC
SH-07	Primary	09/09/89	5.9 ± 2.1	11.0 ± 0.5	Unfiltered		BC
SH-07	Primary	09/09/89	5.4 ± 1.4	3.2 ± 0.4	Filtered		BC
SH-11	Primary	06/03/89	281 ± 20.9	11.8 ± 3.6	Unfiltered		BC
SH-11	Primary	07/19/89	8.9 ± 2.5	8.1 ± 0.6	Unfiltered, Decanted		BC
SH-11	Primary	07/19/89	4.7 ± 1.8	5.6 ± 0.6	Filtered		BC
SH-11	Primary	09/09/89	5.9 ± 2.1	11.0 ± 0.5	Unfiltered		BC
SH-11	Primary	09/09/89	1.2 ± 1.7	5.6 ± 0.6	Filtered		BC
SH-11	Primary	10/17/89	5.23 ± 2.97	2.43 ± 1.68	Filtered		UST
SH-11	Primary	10/31/89	10.4 ± 6.06	6.96 ± 2.82	Unfiltered		UST
SH-11	Primary	10/31/89	9.57 ± 5.05	2.95 ± 2.45	Filtered		UST
RS-05	Primary	10/19/89	7.79 ± 3.55	3.17 ± 1.85	Filtered		UST
RS-05	Primary	10/31/89	37.2 ± 11.1	8.32 ± 3.01	Unfiltered		UST
RS-05	Primary	10/31/89	6.15 ± 4.71	5.30 ± 2.80	Filtered		UST
RS-06	Primary	06/03/89	16.3 ± 4.3	12.6 ± 0.8	Unfiltered		BC
RS-06	Primary	07/23/89	5.1 ± 2.1	14.7 ± 0.3	Unfiltered, Decanted		BC
RS-07	Primary	07/22/89	2.1 ± 0.9	7.7 ± 1.1	Unfiltered		BC
RS-07	Primary	09/11/89	2.0 ± 3.4	8.5 ± 1.2	Unfiltered		BC
RS-07	Primary	09/11/89	1.2 ± 2.1	5.5 ± 0.8	Filtered		BC
RS-08	Primary	06/04/89	12.4 ± 6.1	14.5 ± 1.1	Unfiltered		BC
RS-08	Primary	07/22/89	15.5 ± 1.5	17.1 ± 1.0	Unfiltered, Decanted		BC
RS-08	Primary	03/18/93	14 ± 9	5 ± 4	Filtered		CEP
RS-08	Primary	06/08/93	16 ± 7	13 ± 4	Filtered		CEP
RS-08	Primary	08/09/93	14 ± 5	7 ± 3	Filtered		CEP
RS-08	Primary	11/08/93	24 ± 10	9.1 ± 6.7	Filtered		LAS
RS-08	Primary	11/08/93	19 ± 10	15.1 ± 9.9	Filtered	Gross alpha and beta dissolved.	LAS
RS-11	Primary	12/08/89	1.38 ± 1.63	0.962 ± 2.22	Filtered		UST
RS-11	Primary	12/06/90	1.93 ± 2.19	-1.05 ± 1.96	Filtered		IT
RS-11	Primary	03/04/91	2.54 ± 1.84	0.981 ± 2.19	Filtered		IT
RS-11	Primary	12/07/91	3.77 ± 2.63	1.44 ± 1.29	Filtered		IT
RS-11	Primary	03/05/92	<2	<3	Filtered		CEP

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RS-11	Primary	03/07/93	<2	6 ± 4	Filtered		CEP
RS-11	Primary	02/22/94	0 ± 2.2	2.3 ± 2.4	Filtered		LAS
RS-11	Primary	02/15/95	19.4 ± 5.6	16.6 ± 3.0	Filtered		LAS
RS-11	Reanalysis of Primary	02/15/95	0.4 ± 2.0	3.1 ± 1.7	Filtered		LAS
RS-11	Primary	02/07/96	9.4 ± 4.4	5.4 ± 2.4	Filtered		LAS
RS-11	Primary	02/04/97	6.1 ± 3.9	3.1 ± 2.5	Filtered		LAS
RS-11	Primary	02/04/98	2.60 ± 2.4	3.44 ± 1.4	Filtered		TN
RS-11	Primary	02/06/99	1.58 ± 1.3	2.36 ± 1.5	Filtered		TN
RS-11	Primary	02/15/00	0.381 ± 1.6	0.572 ± 4.4	Filtered		TR
RS-11	Primary	02/06/01	0.782 ± 1.6	5.10 ± 1.7	Filtered		ES
RS-11	Primary	05/01/03	1.65U ± 1.8	0.692U ± 2.3	Filtered		ES
RS-14	Primary	06/04/89	-1.0 ± 2.7	7.6 ± 0.5	Unfiltered		BC
RS-14	Primary	07/22/89	5.2 ± 2.2	5.8 ± 0.7	Unfiltered, Decanted		BC
RS-14	Primary	09/10/89	9.0 ± 1.7	8.1 ± 0.5	Unfiltered		BC
RS-14	Duplicate	09/10/89	7.7 ± 1.8	6.9 ± 0.4	Unfiltered		BC
RS-14	Primary	09/10/89	4.5 ± 1.6	4.4 ± 0.4	Filtered		BC
RS-14	Duplicate	09/10/89	5.2 ± 1.6	5.3 ± 0.4	Filtered		BC
RS-15	Primary	12/08/89	4.12 ± 2.33	3.33 ± 2.51	Filtered		UST
RS-15	Primary	12/07/91	8.02 ± 4.00	4.55 ± 2.12	Filtered		IT
RS-15	Primary	12/06/92	4 ± 3	8 ± 3	Filtered		CEP
RS-16	Primary	03/09/92	3 ± 2	<3	Filtered		CEP
RS-16	Primary	02/09/95	3.1 ± 4.4	1.4 ± 4.0	Filtered		LAS
RS-16	Primary	02/04/97	10.3 ± 6.3	2.9 ± 4.1	Filtered		LAS
RS-16	Primary	05/27/98	5.34 ± 2.7	3.00 ± 1.8	Filtered		TN
RS-17	Primary	12/08/89	3.56 ± 2.61	1.10 ± 2.18	Filtered		UST
RS-17	Primary	12/10/90	8.36 ± 4.63	2.35 ± 2.47	Filtered		IT
RS-17	Primary	12/07/91	9.58 ± 5.41	1.54 ± 2.36	Filtered		IT
RS-17	Primary	12/05/92	3 ± 2	4 ± 3	Filtered		CEP
RS-18	Primary	03/03/89	20 ± 5	11 ± 3	Unfiltered		FGL
RS-18	Primary	06/04/89	27.6 ± 8.4	33.0 ± 1.5	Unfiltered		BC
RS-18	Primary	03/27/90	9.92 ± 4.84	8.48 ± 2.98	Filtered		UST
RS-18	Primary	03/10/91	16.4 ± 5.86	7.84 ± 2.81	Filtered		IT
RS-18	Duplicate	03/10/91	11.0 ± 5.73	6.06 ± 2.97	Filtered		IT
RS-18	Primary	06/04/91	22.0 ± 7.92	9.36 ± 5.13	Filtered		IT
RS-18	Duplicate	06/04/91	18.4 ± 7.50	13.1 ± 5.61	Filtered		IT
RS-18	Primary	03/04/92	3 ± 2	<3	Filtered		CEP
RS-18	Primary	06/04/92	14 ± 6	11 ± 3	Filtered		CEP
RS-18	Split	09/10/92	55 ± 20	40 ± 12	Filtered		BL
RS-18	Reanalysis of Primary	09/10/92	78 ± 24	50 ± 10	Filtered		BL
RS-18	Primary	09/10/92	21 ± 5	32 ± 5	Filtered		CEP
RS-18	Reanalysis of Primary	09/10/92	21 ± 6	—	Filtered		CEP
RS-18	Primary	12/15/92	13 ± 6	8 ± 4	Filtered		CEP
RS-18	Split	12/15/92	24 ± 14	19 ± 9	Filtered		B
RS-18	Primary	06/23/93	6 ± 5	14 ± 8	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RS-18	Primary	11/06/93	23.1 ± 9.3	14.1 ± 6.1	Filtered		LAS
RS-18	Primary	05/04/94	34 ± 12	5.1 ± 6.7	Filtered		LAS
RS-18	Primary	02/17/95	39 ± 10	31.4 ± 5.8	Filtered		LAS
RS-18	Reanalysis of Primary	02/17/95	14.2 ± 5.8	9.1 ± 3.4	Filtered		LAS
RS-18	Primary	08/10/95	13.3 ± 6.9	9.1 ± 5.5	Filtered		LAS
RS-18	Primary	05/16/96	26 ± 11	11.1 ± 7.4	Filtered		LAS
RS-18	Primary	02/03/97	20.6 ± 9.8	6.8 ± 6.2	Filtered		LAS
RS-18	Primary	02/05/98	15.2 ± 4.8	5.86 ± 1.8	Filtered		TN
RS-18	Primary	08/05/98	45.8 ± 8.1	13.7 ± 10	Filtered		TN
RS-18	Primary	05/12/99	26.9 ± 6.2	13.6 ± 2.1	Filtered		TN
RS-18	Primary	05/09/00	21.0 ± 6.3	11.6 ± 3.1	Filtered		TR
RS-18	Primary	02/19/01	4.38 ± 3.5	7.08 ± 1.7	Filtered		ES
RS-18	Primary	05/02/03	29.1 ± 9.1	17.8 ± 6.0	Filtered		ES
RS-22	Primary	06/07/89	245 ± 29.4	227 ± 12.4	Unfiltered		BC
RS-22	Primary	07/22/89	1.9 ± 1.5	2.2 ± 0.3	Unfiltered, Decanted		BC
RS-25	Primary	02/25/03	2.18 ± 1.3	8.98 ± 2.2	Filtered		ES
RS-27	Primary	03/04/92	<2	4 ± 3	Filtered		CEP
RS-27	Primary	06/04/92	-0.3 ± 1.5	2 ± 3	Filtered		CEP
RS-27	Primary	05/17/95	1.1 ± 1.2	3.7 ± 1.4	Filtered		LAS
RS-27	Primary	05/07/98	-0.216 ± 0.80	1.03 ± 1.2	Filtered		TN
RS-28	Primary	09/27/89	42.3 ± 7.5	49.5 ± 1.3	Unfiltered		BC
RS-28	Primary	09/27/89	7.5 ± 2.3	10.0 ± 0.8	Filtered		BC
RS-28	Primary	10/19/89	7.4 ± 3.2	11.7 ± 0.9	Filtered		BC
RS-28	Split	10/19/89	7.07 ± 3.03	3.53 ± 1.79	Filtered		UST
RS-28	Primary	11/01/89	7.38 ± 3.45	7.03 ± 2.94	Unfiltered		UST
RS-28	Primary	11/01/89	4.62 ± 2.59	4.76 ± 2.59	Filtered		UST
RS-28	Primary	03/27/90	5.68 ± 3.50	5.39 ± 2.60	Filtered		UST
RS-28	Primary	06/29/90	9.39 ± 4.83	5.24 ± 2.80	Filtered		UST
RS-28	Primary	09/15/90	9.85 ± 3.90	5.77 ± 2.72	Filtered		UST
RS-28	Duplicate	09/15/90	7.90 ± 4.00	6.97 ± 2.80	Filtered		UST
RS-28	Primary	12/06/90	8.72 ± 4.75	4.93 ± 2.55	Filtered		IT
RS-28	Primary	03/09/91	6.44 ± 3.16	3.32 ± 2.29	Filtered		IT
RS-28	Primary	06/07/91	7.18 ± 3.38	12.7 ± 3.45	Filtered		IT
RS-28	Primary	12/06/91	6.42 ± 3.40	5.13 ± 2.14	Filtered		IT
RS-28	Primary	03/09/92	3 ± 2	<3	Filtered		CEP
RS-28	Primary	06/03/92	3 ± 2	-5 ± 3	Filtered		CEP
RS-28	Split	09/13/92	8.4 ± 7.1	9.7 ± 6.8	Filtered		BL
RS-28	Primary	09/13/92	0.3 ± 2.2	5 ± 4	Filtered		CEP
RS-28	Primary	12/05/92	4 ± 2	7 ± 3	Filtered		CEP
RS-28	Primary	06/22/93	3 ± 2	8 ± 3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RS-28	Primary	11/06/93	6.0 ± 3.8	3.7 ± 3.6	Filtered		LAS
RS-28	Primary	05/07/94	10.9 ± 5.4	8.1 ± 4.1	Filtered		LAS
RS-28	Primary	05/17/95	7.6 ± 4.4	10.5 ± 3.8	Filtered		LAS
RS-28	Primary	11/08/95	3.8 ± 3.1	5.2 ± 2.4	Filtered		LAS

See last page of Table E-1 for footnotes and explanations.

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TABLE E-1
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RS-28	Primary	05/16/96	25.7 ± 7.9	33.7 ± 6.0	Filtered		LAS
RS-28	Primary	05/08/98	4.41 ± 2.5	4.61 ± 1.6	Filtered		TN
RS-28	Primary	11/16/98	5.46 ± 2.3	6.55 ± 1.9	Filtered		TN
RS-28	Primary	05/05/00	3.42 ± 2.3	5.44 ± 2.7	Filtered		TR
RS-28	Primary	05/10/01	0.802 ± 2.2	6.44 ± 1.9	Filtered		ES
RS-54	Primary	09/11/93	3 ± 2	<3	Filtered	Gross alpha: high statistics due to large amount of solids	CEP
RS-54	Primary	09/29/93	11 ± 7	9 ± 3	Filtered		CEP
RS-54	Primary	05/07/94	35 ± 12	15.1 ± 7.3	Filtered		LAS
RS-54	Reanalysis of Primary	05/07/94	42 ± 14	24.1 ± 8.1	Filtered		LAS
RS-54	Primary	08/07/94	27 ± 11	30.3 ± 8.1	Filtered		LAS
RS-54	Primary	08/03/95	25.1 ± 9.5	7.2 ± 6.3	Filtered		LAS
RS-54	Primary	05/16/96	31 ± 10	12.8 ± 5.3	Filtered		LAS
RS-54	Primary	08/23/96	50 ± 14	9.7 ± 6.5	Filtered		LAS
RS-54	Reanalysis of Primary	08/23/96	53 ± 15	21.7 ± 8.0	Filtered		LAS
RS-54	Primary	05/03/97	28.0 ± 9.9	6.7 ± 5.4	Filtered		LAS
RS-54	Primary	08/02/97	24.8 ± 9.9	13.5 ± 6.2	Filtered		LAS
RS-54	Primary	08/27/97	24.8 ± 9.9	13.2 ± 6.4	Filtered		LAS
RS-54	Primary	02/08/98	8.86 ± 3.0	5.92 ± 1.7	Filtered		TN
RS-54	Primary	08/04/98	31.5 ± 14	4.93 ± 18	Filtered		TN
RS-54	Primary	02/02/99	10.2 ± 3.9	10.0 ± 1.9	Filtered		TN
RS-54	Primary	08/18/99	16.1 ± 4.7	11.4 ± 3.2	Filtered		TN
RS-54	Primary	03/15/00	16.5 ± 4.7	11.6 ± 2.8	Filtered		TR
RS-54	Primary	11/01/01	59.44 ± 5.64	7.59 ± 0.96	Filtered		DL
RS-54	Primary	03/01/02	24.29 ± 6.92	5.52 ± 1.17	Filtered		DL
RS-54	Primary	11/07/02	16.9 ± 6.4	11.7 ± 3.5	Filtered		ES
ES-06	Primary	12/08/89	0.404 ± 0.502	0.840 ± 2.10	Filtered		UST
ES-12	Primary	03/03/89	12 ± 5	24 ± 6	Unfiltered		FGL
ES-24	Primary	03/03/89	7 ± 4	7 ± 5	Unfiltered		FGL
ES-24	Primary	06/03/89	10.7 ± 3.8	2.1 ± 0.7	Unfiltered		BC
ES-24	Primary	09/10/89	3.7 ± 2.5	9.2 ± 0.6	Unfiltered		BC
ES-24	Primary	09/10/89	1.0 ± 2.4	6.0 ± 0.6	Filtered		BC
ES-24	Duplicate	09/10/89	10.5 ± 1.9	7.1 ± 0.3	Unfiltered		BC
ES-24	Duplicate	09/10/89	5.9 ± 1.5	6.8 ± 0.3	Filtered		BC
ES-31	Primary	07/23/89	6.9 ± 2.2	6.7 ± 0.5	Unfiltered, Decanted		BC
ES-31	Primary	12/10/90	2.79 ± 2.10	2.09 ± 2.35	Filtered		IT
ES-31	Primary	03/04/91	0.899 ± 1.32	4.79 ± 2.55	Filtered		IT
ES-31	Duplicate	03/04/91	2.37 ± 1.73	2.98 ± 2.29	Filtered		IT
ES-31	Primary	06/06/91	9.12 ± 4.51	4.94 ± 2.59	Filtered		IT
ES-31	Duplicate	06/06/91	8.09 ± 4.90	4.99 ± 2.63	Filtered		IT
ES-31	Primary	12/07/91	7.57 ± 4.02	22.8 ± 3.64	Filtered		IT
ES-31	Primary	03/05/92	4 ± 2	<3	Filtered		CEP
ES-31	Primary	03/03/93	4 ± 3	6 ± 4	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
ES-31	Primary	02/22/94	2 ± 3.1	4.3 ± 2.9	Filtered		LAS
ES-31	Primary	02/15/95	23.5 ± 6.5	20.9 ± 3.7	Filtered		LAS

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
ES-31	Reanalysis of Primary	02/15/95	22.5 ± 6.2	28.0 ± 3.8	Filtered		LAS
ES-31	Primary	02/06/96	2.4 ± 3.6	2.3 ± 2.8	Filtered		LAS
ES-31	Primary	02/04/97	9.9 ± 5.1	3.5 ± 3.1	Filtered		LAS
ES-31	Primary	02/04/98	11.5 ± 3.7	5.09 ± 2.0	Filtered		TN
ES-31	Primary	02/06/99	6.85 ± 3.3	4.33 ± 2.7	Filtered		TN
ES-31	Primary	02/06/00	4.36 ± 2.6	4.79 ± 3.2	Filtered		TR
ES-31	Primary	02/15/01	3.16 ± 2.3	4.41 ± 1.8	Filtered		ES
ES-31	Primary	02/18/02	10.49 ± 3.59	2.79 ± 1.76	Filtered		DL
ES-31	Primary	02/19/03	2.33 ± 2.2	3.64 ± 1.9	Filtered		ES
HAR-03	Primary	09/11/89	19.0 ± 2.5	13.0 ± 0.6	Unfiltered		BC
HAR-03	Primary	09/11/89	5.0 ± 1.7	2.0 ± 0.5	Filtered		BC
HAR-04	Primary	06/02/89	20.7 ± 3.4	19.7 ± 0.9	Unfiltered		BC
HAR-04	Primary	07/23/89	1.7 ± 1.3	1.1 ± 0.3	Unfiltered, Decanted		BC
HAR-04	Primary	09/11/89	8.9 ± 1.6	8.9 ± 0.5	Unfiltered		BC
HAR-04	Primary	09/11/89	1.6 ± 0.8	3.1 ± 0.2	Filtered		BC
HAR-11	Primary	06/02/89	92.5 ± 14.7	80.6 ± 3.1	Unfiltered		BC
HAR-11	Primary	07/22/89	4.9 ± 1.1	12.8 ± 0.9	Unfiltered, Decanted		BC
HAR-14	Primary	06/02/89	34.0 ± 5.7	47.4 ± 1.4	Unfiltered		BC
HAR-14	Primary	07/22/89	11.9 ± 2.3	8.2 ± 0.5	Unfiltered, Decanted		BC
HAR-14	Primary	09/12/89	9.2 ± 1.0	9.0 ± 0.2	Unfiltered		BC
HAR-14	Split	09/12/89	-1.0 ± 2.0	9.7 ± 0.8	Filtered		BC
HAR-14	Split	09/12/89	0 ± 3	14 ± 6	Unfiltered		TMA
HAR-14	Split	09/12/89	1 ± 5	3 ± 5	Filtered		TMA
HAR-14	Primary	03/16/93	5 ± 3	5 ± 4	Filtered		CEP
HAR-14	Primary	06/08/93	6 ± 3	11 ± 4	Filtered		CEP
HAR-14	Primary	08/09/93	2 ± 1	9 ± 3	Filtered		CEP
HAR-14	Primary	11/04/93	4.4 ± 2.7	5.4 ± 2.8	Filtered		LAS
HAR-15	Primary	03/16/93	70 ± 14	45 ± 9	Filtered		CEP
HAR-15	Primary	03/16/93	8 ± 5	38 ± 8	Filtered	Gross alpha and beta dissolved.	CEP
HAR-15	Primary	06/08/93	54 ± 11	66 ± 10	Filtered		CEP
HAR-15	Reanalysis of Primary	06/08/93	4 ± 3	7 ± 5	Filtered	Gross alpha and beta dissolved. Gross alpha: high statistics due to large amounts of solids.	CEP
HAR-15	Primary	08/09/93	4 ± 3	<3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
HAR-15	Primary	11/04/93	70 ± 16	34.9 ± 8.6	Filtered		LAS
HAR-15	Primary	11/04/93	14.8 ± 6.4	9.0 ± 3.7	Filtered	Gross alpha and beta dissolved.	LAS
HAR-27	Primary	12/08/89	2.69 ± 2.73	5.65 ± 2.73	Filtered		UST
HAR-30	Primary	06/02/89	6.1 ± 2.8	10.2 ± 0.9	Unfiltered		BC
HAR-30	Primary	07/22/89	11.8 ± 2.3	7.4 ± 0.6	Unfiltered, Decanted		BC
HAR-30	Primary	07/22/89	5.6 ± 2.2	8.4 ± 0.7	Filtered		BC
HAR-30	Primary	07/22/89	5 ± 2	3 ± 4	Unfiltered		FGL
HAR-30	Primary	09/11/89	14.2 ± 4.3	11.3 ± 1.6	Unfiltered		BC
HAR-30	Primary	06/29/90	10.7 ± 4.0	10.5 ± 1.4	Filtered		BC
HAR-30	Primary	06/29/90	6.20 ± 3.64	6.17 ± 2.92	Filtered		UST

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
Chatsworth Formation Wells							
RD-01	Primary	06/01/89	6.2 ± 4.8	6.8 ± 0.7	Unfiltered		BC
RD-01	Primary	07/22/89	4.2 ± 1.5	8.5 ± 0.5	Unfiltered, Decanted		BC
RD-01	Primary	09/11/89	11.5 ± 3.1	12.5 ± 1.1	Unfiltered		BC
RD-01	Primary	09/11/89	8.7 ± 2.8	14.7 ± 1.0	Filtered		BC
RD-02	Primary	06/03/89	6.9 ± 3.2	2.3 ± 0.6	Unfiltered		BC
RD-02	Primary	07/23/89	3.9 ± 1.6	7.1 ± 0.5	Unfiltered, Decanted		BC
RD-03	Primary	06/07/89	1.9 ± 3.1	6.6 ± 0.7	Unfiltered		BC
RD-03	Primary	07/22/89	3.5 ± 1.6	7.7 ± 0.5	Unfiltered, Decanted		BC
RD-03	Primary	09/10/89	10.5 ± 1.9	7.1 ± 0.3	Unfiltered		BC
RD-03	Primary	09/10/89	5.9 ± 1.5	6.8 ± 0.3	Filtered		BC
RD-03	Primary	09/12/89	11.0 ± 2.2	4.0 ± 0.7	Unfiltered		BC
RD-03	Split	09/12/89	0 ± 2	0 ± 2	Unfiltered		TMA
RD-03	Primary	09/12/89	10.0 ± 2.2	4.0 ± 0.7	Filtered		BC
RD-03	Split	09/12/89	0 ± 2	19 ± 3	Filtered		TMA
RD-04	Primary	06/04/89	5.1 ± 7.6	4.3 ± 1.4	Unfiltered		BC
RD-04	Primary	06/04/89	2.0 ± 3.5	8.4 ± 0.6	Unfiltered		BC
RD-04	Primary	07/22/89	4.6 ± 1.6	9.2 ± 0.4	Unfiltered, Decanted		BC
RD-05B	Primary	06/07/89	9.8 ± 2.5	-1.0 ± 0.6	Unfiltered		BC
RD-05B	Primary	07/22/89	5.1 ± 1.7	7.9 ± 0.5	Unfiltered, Decanted		BC
RD-05B	Primary	09/10/89	2.0 ± 1.5	10.0 ± 0.3	Unfiltered		BC
RD-05B	Primary	09/10/89	3.5 ± 1.5	7.3 ± 0.3	Filtered		BC
RD-05B	Primary	03/16/93	<2	<3	Filtered		CEP
RD-05B	Primary	06/07/93	10 ± 4	21 ± 4	Filtered		CEP
RD-05B	Primary	08/09/93	8 ± 3	13 ± 3	Filtered		CEP
RD-05B	Primary	11/22/93	3.0 ± 4.7	5.4 ± 4.3	Filtered		LAS
RD-06	Primary	06/07/89	7.3 ± 2.2	7.5 ± 0.6	Unfiltered		BC
RD-06	Primary	07/22/89	18.1 ± 2.9	11.3 ± 0.8	Unfiltered, Decanted		BC
RD-06	Primary	09/10/89	4.0 ± 1.6	5.7 ± 0.3	Unfiltered		BC
RD-06	Primary	09/10/89	3.2 ± 1.3	7.5 ± 0.4	Filtered		BC
RD-06	Primary	10/18/89	2.10 ± 1.98	5.16 ± 1.99	Filtered		UST
RD-06	Primary	10/31/89	4.9 ± 3.98	6.03 ± 2.77	Unfiltered		UST
RD-06	Primary	10/31/89	3.11 ± 2.42	6.22 ± 2.79	Filtered		UST
RD-06	Primary	03/06/91	9.99 ± 5.83	3.58 ± 2.32	Filtered		IT
RD-06	Primary	03/10/92	<2	<3	Filtered		CEP
RD-06	Primary	03/16/93	4 ± 3	7 ± 4	Filtered	Gross alpha: high statistics due to large amount of solids. Gross alpha: high statistics due to large amount of solids.	CEP
RD-06	Primary	06/07/93	3 ± 2	8 ± 7	Filtered		CEP
RD-06	Primary	08/09/93	5 ± 3	4 ± 3	Filtered		CEP
RD-06	Primary	11/22/93	1.5 ± 4.1	5.5 ± 4.6	Filtered		LAS
RD-07	Primary	06/04/89	11.5 ± 5.0	8.1 ± 1.0	Unfiltered		BC
RD-07	Primary	07/22/89	6.6 ± 1.5	5.3 ± 0.5	Unfiltered, Decanted		BC
RD-07	Primary	09/13/89	8.0 ± 2.6	13.6 ± 0.9	Unfiltered		BC
RD-07	Primary	09/13/89	2.6 ± 1.8	9.9 ± 0.7	Filtered		BC
RD-07	Primary	12/05/90	7.19 ± 3.19	6.66 ± 2.72	Filtered		IT

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-07	Primary	03/09/91	5.70 ± 2.67	3.63 ± 2.42	Filtered	Gross alpha: high statistics due to large amount of solids.	IT
RD-07	Primary	12/07/91	7.42 ± 3.19	5.06 ± 1.61	Filtered		IT
RD-07	Primary	03/06/92	<2	6 ± 4	Filtered		CEP
RD-07	Primary	03/07/93	3 ± 2	5 ± 4	Filtered		CEP
RD-07	Primary	02/27/94	6.4 ± 3.7	4.7 ± 2.7	Filtered		LAS
RD-07	Primary	08/09/94	6.1 ± 3.5	5.4 ± 2.8	Filtered		LAS
RD-07	Primary	02/09/95	3.4 ± 3.3	5.9 ± 3.2	Filtered		LAS
RD-07	Duplicate	02/09/95	10.8 ± 5.1	6.6 ± 3.5	Filtered		LAS
RD-07	Primary	08/04/95	6.6 ± 3.6	7.5 ± 2.8	Filtered		LAS
RD-07	Primary	02/07/96	12.2 ± 4.5	3.1 ± 1.9	Filtered		LAS
RD-07	Primary	08/18/96	8.7 ± 4.5	6.5 ± 3.2	Filtered		LAS
RD-07	Primary	02/25/97	9.5 ± 3.9	5.9 ± 2.4	Filtered		LAS
RD-07	Primary	08/25/97	12.5 ± 5.6	8.1 ± 4.3	Filtered		LAS
RD-07	Primary	02/05/98	10.3 ± 2.8	8.27 ± 1.7	Filtered		TN
RD-07	Primary	08/05/98	9.43 ± 8.9	-7.81 ± 18	Filtered		TN
RD-07	Primary	02/06/99	5.53 ± 2.3	11.9 ± 1.9	Filtered		TN
RD-07	Primary	08/19/99	6.94 ± 2.3	8.51 ± 1.7	Filtered		TN
RD-07	Primary	03/16/00	9.92 ± 3.2	9.58 ± 2.3	Filtered		TR
RD-07	Primary	08/10/00	8.94 ± 2.9	7.04 ± 2.6	Filtered		TR
RD-07	Primary	02/23/01	12.4 ± 3.7	8.74 ± 2.1	Filtered		ES
RD-07	Primary	11/07/01	6.18 ± 3.28	5.90 ± 1.5	Filtered		DL
RD-07	Primary	02/22/02	18.36 ± 5.66	4.37 ± 1.15	Filtered		DL
RD-07	Primary	08/20/02	4.94 ± 3.5	5.90 ± 1.6	Filtered		ES
RD-07(Z3)	Primary	02/10/03	14.4 ± 3.5	15.5 ± 3.1	Filtered		ES
RD-07(Z13)	Primary	08/28/03	6.82 ± 2.9	9.29 ± 3.2	Filtered		ES
RD-08	Primary	06/07/89	-1.0 ± 2.9	4.1 ± 0.7	Unfiltered		BC
RD-08	Primary	07/24/89	-1.0 ± 1.0	4.5 ± 0.3	Unfiltered, Decanted		BC
RD-08	Primary	09/13/89	-1.0 ± 1.4	6.9 ± 0.5	Unfiltered		BC
RD-08	Primary	09/13/89	-1.0 ± 2.0	1.9 ± 0.8	Filtered		BC
RD-09	Primary	03/03/89	4 ± 2	7 ± 4	Unfiltered		FGL
RD-09	Primary	06/03/89	-1.0 ± 3.0	6.8 ± 0.7	Unfiltered		BC
RD-10	Primary	06/07/89	2.3 ± 2.5	2.6 ± 0.5	Unfiltered		BC
RD-10	Primary	07/22/89	6.9 ± 1.8	5.9 ± 0.4	Unfiltered, Decanted		BC
RD-10	Primary	09/10/89	5.0 ± 1.6	14.0 ± 0.4	Unfiltered		BC
RD-10	Primary	09/10/89	4.0 ± 1.5	10.0 ± 0.3	Filtered		BC
RD-10	Primary	03/06/91	1.85 ± 2.44	2.56 ± 2.02	Filtered		IT
RD-10	Primary	03/07/92	<2	<3	Filtered		CEP
RD-12	Primary	06/03/89	-1.0 ± 3.9	3.3 ± 0.9	Unfiltered		BC
RD-12	Primary	07/22/89	-1.0 ± 1.5	12.4 ± 1.3	Unfiltered, Decanted		BC
RD-13	Primary	09/05/89	7.6 ± 1.6	10.6 ± 0.3	Unfiltered		BC
RD-13	Primary	09/05/89	5.9 ± 1.3	10.1 ± 0.3	Filtered		BC
RD-13	Primary	09/12/89	7.0 ± 1.9	46.0 ± 0.5	Unfiltered		BC
RD-13	Split	09/12/89	0 ± 2	7 ± 2	Unfiltered		TMA
RD-13	Primary	09/12/89	7.0 ± 2.4	5.6 ± 0.7	Filtered		BC

See last page of Table E-I for footnotes and explanations.

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TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-13	Split	09/12/89	4 ± 3	2 ± 2	Filtered		TMA
RD-13	Primary	10/17/89	5.9 ± 2.4	10.3 ± 0.6	Filtered		BC
RD-13	Primary	12/06/90	1.69 ± 2.16	5.03 ± 2.65	Filtered		IT
RD-13	Primary	03/08/91	2.15 ± 2.02	6.02 ± 2.72	Filtered		IT
RD-13	Primary	12/10/91	4.02 ± 2.51	5.68 ± 1.77	Filtered		IT
RD-13	Primary	03/12/92	<2	<3	Filtered		CEP
RD-13	Primary	03/08/93	7 ± 3	7 ± 4	Filtered		CEP
RD-13	Primary	08/26/97	7.5 ± 4.6	6.4 ± 3.8	Filtered		LAS
RD-14	Primary	08/29/89	5.0 ± 2.19	3.0 ± 0.80	Unfiltered		BC
RD-14	Primary	08/29/89	4.0 ± 2.07	4.0 ± 0.77	Filtered		BC
RD-14	Primary	10/18/89	5.8 ± 2.3	8.6 ± 0.7	Filtered		BC
RD-14	Duplicate	10/18/89	4.83 ± 2.48	1.97 ± 1.65	Filtered		UST
RD-14	Primary	10/31/89	6.33 ± 3.05	5.15 ± 2.63	Unfiltered		UST
RD-14	Primary	10/31/89	5.27 ± 2.62	5.01 ± 2.62	Filtered		UST
RD-14	Primary	12/07/90	6.29 ± 3.02	6.69 ± 2.80	Filtered		IT
RD-14	Primary	03/09/91	9.44 ± 4.63	5.36 ± 2.53	Filtered		IT
RD-14	Primary	12/06/91	5.92 ± 3.40	7.66 ± 2.22	Filtered		IT
RD-14	Primary	03/05/92	3 ± 2	<3	Filtered		CEP
RD-14	Primary	03/07/93	4 ± 3	<3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RD-14	Primary	02/24/94	1.8 ± 3	0.8 ± 3.2	Filtered		LAS
RD-14	Primary	02/08/95	5.4 ± 4.4	5.7 ± 3.5	Filtered		LAS
RD-14	Primary	02/16/96	4.4 ± 3.4	5.4 ± 2.2	Filtered		LAS
RD-14	Primary	02/07/97	3.7 ± 3.6	7.7 ± 3.3	Filtered		LAS
RD-15	Primary	08/30/89	8.0 ± 2.5	5.0 ± 0.89	Unfiltered		BC
RD-15	Primary	08/30/89	6.0 ± 2.62	12.0 ± 0.89	Filtered		BC
RD-15	Primary	10/19/89	12.5 ± 2.7	10.7 ± 1.0	Filtered		BC
RD-15	Primary	12/07/90	5.82 ± 2.76	6.45 ± 2.77	Filtered		IT
RD-15	Primary	03/10/91	9.29 ± 3.41	8.99 ± 3.05	Filtered		IT
RD-15	Primary	12/06/91	12.3 ± 5.11	9.19 ± 2.48	Filtered		IT
RD-15	Primary	03/11/92	3 ± 2	7 ± 3	Filtered		CEP
RD-15	Split	03/11/92	7.7 ± 5.7	14 ± 3	Filtered		TEL
RD-15	Primary	05/10/01	2.02 ± 2.4	3.68 ± 3.0	Filtered		ES
RD-15	Primary	03/06/02	7.84 ± 3.91	4.77 ± 1.32	Filtered		DL
RD-15	Primary	02/26/03	5.24 ± 3.1	14.4 ± 4.6	Filtered		ES
RD-16	Primary	09/14/89	15.3 ± 3.7	5.9 ± 1.8	Unfiltered		BC
RD-16	Primary	09/14/89	4.1 ± 2.0	6.6 ± 1.0	Filtered		BC
RD-16	Primary	10/25/89	6.4 ± 2.3	9.2 ± 0.6	Filtered		BC
RD-16	Primary	07/01/90	1.92 ± 2.37	6.35 ± 2.87	Filtered		UST
RD-16	Primary	12/07/90	4.88 ± 2.54	6.39 ± 2.72	Filtered		IT
RD-16	Primary	03/09/91	6.12 ± 2.82	4.20 ± 2.51	Filtered		IT
RD-16	Primary	12/05/91	3.00 ± 2.27	6.38 ± 1.93	Filtered		IT
RD-16	Primary	06/06/92	2 ± 2	-2 ± 3	Filtered		CEP
RD-16	Primary	05/27/98	4.72 ± 2.4	7.56 ± 1.7	Filtered		TN

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-17	Primary	09/21/89	9.4 ± 2.1	8.3 ± 1.1	Unfiltered		BC
RD-17	Primary	09/21/89	1.7 ± 1.6	8.5 ± 0.8	Filtered		BC
RD-17	Primary	10/18/89	-1.0 ± 1.5	5.6 ± 0.5	Filtered		BC
RD-17	Duplicate	10/18/89	2.8 ± 2.0	5.7 ± 0.5	Filtered		BC
RD-17	Primary	12/04/90	4.50 ± 2.87	1.63 ± 2.22	Filtered		IT
RD-17	Primary	03/05/91	4.22 ± 2.27	1.69 ± 0.994	Filtered		IT
RD-17	Split	12/07/91	<2	<3	Filtered		CEP
RD-17	Primary	12/07/91	2.42 ± 1.81	4.94 ± 1.63	Filtered		IT
RD-17	Primary	03/04/92	<2	<3	Filtered		CEP
RD-17	Primary	03/05/93	3 ± 2	4 ± 3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RD-17	Primary	02/26/94	3.8 ± 3.5	7.4 ± 2.9	Filtered		LAS
RD-17	Primary	02/08/95	4.7 ± 3.6	3.1 ± 3.0	Filtered		LAS
RD-17	Primary	02/04/96	8.8 ± 3.3	2.0 ± 1.5	Filtered		LAS
RD-17	Primary	02/08/97	4.5 ± 3.2	7.3 ± 2.6	Filtered		LAS
RD-17	Primary	02/04/98	4.18 ± 2.0	6.25 ± 1.6	Filtered		TN
RD-17	Primary	02/08/99	4.31 ± 2.0	5.94 ± 1.7	Filtered		TN
RD-17	Primary	02/21/00	3.57 ± 2.6	6.66 ± 3.7	Filtered		TR
RD-17	Primary	02/14/01	4.46 ± 2.6	7.87 ± 1.6	Filtered		ES
RD-17	Primary	03/01/02	4.70 ± 1.96	4.59 ± 1.30	Filtered		DL
RD-17	Primary	02/24/03	2.73 ± 2.3	7.25 ± 3.6	Filtered		ES
RD-18	Primary	09/15/89	16.0 ± 2.5	14.4 ± 1.2	Unfiltered		BC
RD-18	Primary	09/15/89	12.7 ± 2.3	6.7 ± 1.2	Filtered		BC
RD-18	Primary	10/26/89	6.0 ± 2.0	9.6 ± 0.7	Filtered		BC
RD-18	Primary	07/01/90	3.85 ± 2.23	6.95 ± 2.79	Filtered		UST
RD-18	Primary	12/08/90	8.20 ± 3.26	6.62 ± 2.90	Filtered		IT
RD-18	Primary	03/09/91	3.31 ± 1.87	4.05 ± 2.42	Filtered		IT
RD-18	Primary	12/11/91	2.51 ± 1.91	3.45 ± 1.27	Filtered		IT
RD-18	Primary	03/12/92	7 ± 2	11 ± 3	Filtered		CEP
RD-18	Primary	03/17/93	4 ± 2	12 ± 4	Filtered		CEP
RD-18	Primary	06/08/93	8 ± 3	22 ± 4	Filtered		CEP
RD-18	Primary	08/09/93	7 ± 2	16 ± 3	Filtered		CEP
RD-18	Primary	11/04/93	1.5 ± 1.9	7.2 ± 2.5	Filtered		LAS
RD-18	Primary	02/22/94	13.6 ± 4.4	8.7 ± 2.6	Filtered		LAS
RD-18	Primary	02/17/95	22.1 ± 5.3	20.4 ± 3.0	Filtered		LAS
RD-18	Reanalysis of Primary	02/17/95	8.5 ± 3.4	12.2 ± 2.2	Filtered		LAS
RD-18	Primary	02/05/96	1.9 ± 2.3	2.4 ± 1.6	Filtered		LAS
RD-18	Primary	02/06/97	11.2 ± 3.8	7.3 ± 2.3	Filtered		LAS
RD-18	Primary	02/06/98	3.42 ± 1.5	4.95 ± 1.5	Filtered		TN
RD-19	Primary	08/31/89	10.0 ± 2.35	18.0 ± 0.77	Unfiltered		BC
RD-19	Primary	08/31/89	13.0 ± 2.41	1.3 ± 0.88	Filtered		BC
RD-19	Primary	10/26/89	11.0 ± 2.1	13.4 ± 0.7	Filtered		BC
RD-19	Primary	12/08/90	6.66 ± 3.17	9.06 ± 3.20	Filtered		IT
RD-19	Duplicate	12/08/90	11.9 ± 5.63	11.6 ± 3.38	Filtered		IT
RD-19	Primary	03/08/91	11.7 ± 5.80	7.74 ± 2.89	Filtered		IT

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-19	Duplicate	03/08/91	8.80 ± 4.49	7.96 ± 2.93	Filtered		IT
RD-19	Primary	12/11/91	9.20 ± 5.31	11.2 ± 3.47	Filtered		IT
RD-19	Primary	03/12/92	17 ± 4	15 ± 4	Filtered		CEP
RD-19	Primary	03/08/93	6 ± 4	12 ± 4	Filtered	Gross alpha and beta high statistics due to large amount of solids.	CEP
RD-19	Duplicate	03/08/93	5 ± 4	13 ± 4	Filtered	Gross alpha and beta high statistics due to large amount of solids.	CEP
RD-19	Primary	02/26/94	18 ± 9.2	17.5 ± 5.4	Filtered		LAS
RD-19	Reanalysis of Primary	02/26/94	21 ± 10	32.1 ± 8.9	Filtered		LAS
RD-19	Primary	02/15/95	100 ± 22	50.2 ± 9.8	Filtered		LAS
RD-19	Reanalysis of Primary	02/15/95	13.3 ± 8.7	34.6 ± 7.0	Filtered		LAS
RD-19	Primary	02/06/96	36 ± 12	29.8 ± 7.1	Filtered		LAS
RD-19	Reanalysis of Primary	02/06/96	6.9 ± 5.0	3.6 ± 2.8	Filtered		LAS
RD-19	Primary	02/07/97	27 ± 10	17.3 ± 5.7	Filtered		LAS
RD-19	Primary	02/06/98	25.6 ± 5.7	18.6 ± 2.5	Filtered		TN
RD-20	Primary	09/05/89	14.4 ± 2.4	34.1 ± 0.8	Unfiltered		BC
RD-20	Primary	09/05/89	10.0 ± 2.3	16.7 ± 0.7	Filtered		BC
RD-20	Primary	10/17/89	13.1 ± 3.3	17.06 ± 1.0	Filtered		BC
RD-20	Primary	12/07/90	4.74 ± 2.36	2.49 ± 2.30	Filtered		IT
RD-20	Primary	03/05/91	4.07 ± 2.23	5.29 ± 1.39	Filtered		IT
RD-20	Primary	12/10/91	4.43 ± 3.96	9.08 ± 3.07	Filtered		IT
RD-20	Primary	03/04/92	4 ± 3	5 ± 3	Filtered		CEP
RD-20	Primary	03/03/93	6 ± 5	10 ± 4	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RD-20	Primary	02/22/94	5 ± 6.4	8.3 ± 6.9	Filtered		LAS
RD-20	Primary	02/16/95	35 ± 11	36.3 ± 6.9	Filtered		LAS
RD-20	Reanalysis of Primary	02/16/95	10.1 ± 6.0	9.6 ± 6.0	Filtered		LAS
RD-20	Duplicate	02/16/95	46 ± 12	35.4 ± 6.7	Filtered		LAS
RD-20	Reanalysis of Duplicate	02/16/95	6.5 ± 5.5	10.3 ± 6.9	Filtered		LAS
RD-20	Primary	02/04/96	6.5 ± 6.9	4.7 ± 4.2	Filtered		LAS
RD-20	Primary	02/08/97	14.4 ± 6.9	5.8 ± 3.9	Filtered		LAS
RD-20	Primary	02/04/98	8.04 ± 3.6	8.24 ± 2.0	Filtered		TN
RD-21	Primary	09/12/89	6.5 ± 2.2	5.5 ± 1.1	Unfiltered		BC
RD-21	Primary	09/12/89	6.0 ± 2.0	-0.5 ± 1.0	Filtered		BC
RD-21	Primary	10/20/89	7.7 ± 2.6	10.8 ± 0.9	Filtered		BC
RD-21	Duplicate	10/20/89	12.3 ± 3.0	3.1 ± 1.0	Filtered		BC
RD-21	Primary	12/03/90	2.91 ± 2.53	1.85 ± 2.34	Filtered		IT
RD-21	Primary	03/08/91	7.80 ± 4.84	5.85 ± 2.62	Filtered		IT
RD-21	Primary	12/05/91	7.59 ± 3.74	6.37 ± 2.11	Filtered		IT
RD-21	Primary	03/04/92	5 ± 2	5 ± 4	Filtered		CEP
RD-21	Primary	03/06/93	3 ± 2	<3	Filtered		CEP
RD-21	Primary	06/22/93	13 ± 4	37 ± 5	Filtered		CEP
RD-21	Primary	08/06/93	3 ± 2	<3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RD-21	Primary	11/06/93	4.1 ± 3.0	6.5 ± 3.5	Filtered		LAS
RD-21	Primary	02/25/94	7.2 ± 4.5	6.1 ± 3.5	Filtered		LAS

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-21	Primary	08/08/94	6.8 ± 3.9	6.6 ± 3.3	Filtered		LAS
RD-21	Primary	02/08/95	8.2 ± 4.8	9.2 ± 3.7	Filtered		LAS
RD-21	Primary	08/31/95	13.7 ± 6.3	5.5 ± 3.9	Filtered		LAS
RD-21	Primary	02/16/96	6.8 ± 4.1	5.1 ± 2.8	Filtered		LAS
RD-21	Primary	08/18/96	10.3 ± 5.6	3.5 ± 3.5	Filtered		LAS
RD-21	Primary	02/06/97	4.6 ± 3.8	4.5 ± 3.1	Filtered		LAS
RD-21	Primary	02/09/98	11.8 ± 3.3	6.79 ± 1.7	Filtered		TN
RD-21	Primary	02/16/99	13.0 ± 4.5	6.58 ± 1.7	Filtered		TN
RD-21	Primary	03/15/00	17.2 ± 4.5	6.85 ± 2.2	Filtered		TR
RD-21	Primary	10/24/01	21.45 ± 5.64	3.85 ± 0.96	Filtered		DL
RD-21	Primary	03/06/02	5.04 ± 2.93	3.07 ± 1.20	Filtered		DL
RD-21(Z2)	Primary	02/25/03	2.78 ± 2.5	7.72 ± 3.6	Filtered		ES
RD-22	Primary	09/13/89	7.8 ± 2.8	5.5 ± 1.3	Unfiltered		BC
RD-22	Primary	09/13/89	7.8 ± 1.7	35.0 ± 0.8	Filtered		BC
RD-22	Primary	10/19/89	-1.0 ± 2.1	9.0 ± 0.8	Filtered		BC
RD-22	Primary	03/27/90	2.92 ± 2.85	6.02 ± 2.75	Filtered		UST
RD-22	Primary	07/01/90	3.27 ± 3.12	5.01 ± 2.63	Filtered		UST
RD-22	Primary	09/15/90	0.539 ± 1.87	7.38 ± 2.88	Filtered		UST
RD-22	Primary	12/04/90	5.87 ± 4.09	6.14 ± 2.78	Filtered		IT
RD-22	Duplicate	12/04/90	3.57 ± 3.91	3.71 ± 2.57	Filtered		IT
RD-22	Primary	03/11/91	11.4 ± 7.46	3.64 ± 2.39	Filtered		IT
RD-22	Primary	06/05/91	2.71 ± 2.60	7.64 ± 2.85	Filtered		IT
RD-22	Primary	12/06/91	3.59 ± 3.06	5.17 ± 2.36	Filtered		IT
RD-22	Primary	06/05/92	3 ± 2	-3 ± 3	Filtered		CEP
RD-22	Primary	09/10/92	3 ± 2	15 ± 4	Filtered		CEP
RD-22	Primary	12/04/92	3 ± 2	14 ± 3	Filtered		CEP
RD-22	Primary	03/20/93	<2	10 ± 3	Filtered		CEP
RD-22	Primary	06/22/93	10 ± 4	36 ± 5	Filtered		CEP
RD-22	Primary	08/05/93	<2	<3	Filtered		CEP
RD-22	Primary	11/21/93	3.5 ± 3.8	8.9 ± 4.2	Filtered		LAS
RD-22	Primary	02/24/94	4.6 ± 5.1	8.6 ± 5.4	Filtered		LAS
RD-22	Primary	08/09/94	2.3 ± 3.3	7.7 ± 3.6	Filtered		LAS
RD-22	Primary	02/17/95	29.6 ± 8.4	26.6 ± 4.8	Filtered		LAS
RD-22	Reanalysis of Primary	02/17/95	0.2 ± 2.6	4.5 ± 3.4	Filtered		LAS
RD-22	Primary	08/29/95	3.1 ± 4.2	8.1 ± 4.5	Filtered		LAS
RD-22	Primary	02/16/96	2.2 ± 3.0	2.6 ± 2.1	Filtered		LAS
RD-22	Primary	08/18/96	-0.3 ± 4.3	8.9 ± 4.9	Filtered		LAS
RD-22	Primary	02/26/97	3.9 ± 4.2	7.5 ± 3.8	Filtered		LAS
RD-22	Primary	05/28/98	4.18 ± 2.8	7.19 ± 1.7	Filtered		TN
RD-22	Primary	02/17/99	0.868 ± 2.0	4.48 ± 1.7	Filtered		TN
RD-22	Primary	02/06/00	5.12 ± 3.3	8.10 ± 2.8	Filtered		TR
RD-22	Primary	02/16/01	3.64 ± 3.3	8.59 ± 1.7	Filtered		ES
RD-22	Primary	02/20/02	9.21 ± 3.56	4.79 ± 9.21	Filtered		DL
RD-22(Z2)	Primary	02/24/03	2.97 ± 1.4	9.22 ± 1.9	Filtered		ES

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-23	Primary	09/13/89	8.6 ± 2.4	7.4 ± 1.2	Unfiltered		BC
RD-23	Primary	09/13/89	8.2 ± 2.3	-0.5 ± 1.2	Filtered		BC
RD-23	Primary	10/20/89	9.4 ± 3.0	6.5 ± 0.9	Filtered		BC
RD-23	Primary	06/29/90	0.58 ± 2.12	1.73 ± 2.18	Filtered		UST
RD-23	Primary	12/05/90	1.28 ± 1.52	2.27 ± 2.26	Filtered		IT
RD-23	Primary	03/11/91	3.30 ± 1.94	0.626 ± 1.89	Filtered		IT
RD-23	Duplicate	03/11/91	1.61 ± 1.34	3.98 ± 2.41	Filtered		IT
RD-23	Primary	12/05/91	3.80 ± 2.08	5.50 ± 1.50	Filtered		IT
RD-23	Primary	03/04/92	<2	<3	Filtered		CEP
RD-23	Primary	03/21/93	<2	9 ± 2	Filtered		CEP
RD-23	Primary	06/23/93	<2	6 ± 4	Filtered		CEP
RD-23	Primary	08/06/93	<2	<3	Filtered		CEP
RD-23	Primary	11/06/93	2.9 ± 2.5	3.3 ± 2.4	Filtered		LAS
RD-23	Primary	02/25/94	3.1 ± 2.8	3.9 ± 2.8	Filtered		LAS
RD-23	Primary	08/08/94	2.5 ± 2.7	5.7 ± 2.7	Filtered		LAS
RD-23	Primary	11/22/94	4.4 ± 2.8	4.5 ± 2.0	Filtered		LAS
RD-23	Primary	02/05/95	3.1 ± 3.1	8.4 ± 3.3	Filtered		LAS
RD-23	Primary	08/03/95	4.1 ± 3.2	7.2 ± 3.1	Filtered		LAS
RD-23	Primary	02/16/96	3.6 ± 2.7	4.0 ± 1.8	Filtered		LAS
RD-23	Primary	08/18/96	2.9 ± 2.8	3.9 ± 2.5	Filtered		LAS
RD-23	Primary	02/27/97	6.4 ± 3.1	3.8 ± 1.9	Filtered		LAS
RD-23	Primary	02/07/98	4.11 ± 1.7	4.93 ± 1.4	Filtered		TN
RD-23	Primary	02/08/99	4.69 ± 2.1	4.64 ± 1.5	Filtered		TN
RD-23	Primary	02/05/00	4.69 ± 2.3	5.26 ± 2.6	Filtered		TR
RD-23	Primary	10/25/01	4.89 ± 2.43	2.42 ± 1.12	Filtered		DL
RD-23	Primary	10/25/01	3.05 ± 1.94	3.66 ± 1.29	Filtered		DL
RD-23(Z1)	Primary	02/26/03	4.42 ± 1.3	6.18 ± 1.8	Filtered		ES
RD-24	Primary	09/12/89	8.6 ± 1.6	14.0 ± 0.6	Unfiltered		BC
RD-24	Primary	09/12/89	4.3 ± 1.0	7.4 ± 0.2	Filtered		BC
RD-24	Split	09/12/89	3 ± 2	6 ± 2	Unfiltered		TMA
RD-24	Split	09/12/89	2 ± 3	7 ± 2	Filtered		TMA
RD-24	Primary	10/17/89	2.4 ± 2.3	7.3 ± 0.5	Filtered		BC
RD-24	Primary	12/05/90	6.15 ± 3.65	6.12 ± 2.81	Filtered		IT
RD-24	Primary	03/06/91	5.46 ± 2.99	3.68 ± 1.86	Filtered		IT
RD-24	Primary	12/11/91	6.33 ± 3.50	5.21 ± 1.84	Filtered		IT
RD-24	Primary	03/06/92	3 ± 2	<3	Filtered		CEP
RD-24	Primary	03/07/93	3 ± 2	7 ± 4	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RD-24	Primary	02/23/94	7.6 ± 4.4	7 ± 3.3	Filtered		LAS
RD-24	Primary	08/08/94	3.0 ± 2.7	6.9 ± 2.7	Filtered		LAS
RD-24	Primary	02/16/95	16.5 ± 5.9	25.2 ± 4.4	Filtered		LAS
RD-24	Reanalysis of Primary	02/16/95	10 ± 4.4	13.0 ± 2.8	Filtered		LAS
RD-24	Primary	08/10/95	3.4 ± 2.8	5.9 ± 2.5	Filtered		LAS
RD-24	Primary	02/07/96	9.0 ± 5.6	2.9 ± 3.5	Filtered		LAS
RD-24	Primary	08/07/96	3.5 ± 5.0	6.8 ± 3.9	Filtered		LAS

See last page of Table E-I for footnotes and explanations.

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TABLE E-1
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-24	Primary	02/07/97	4.7 ± 3.5	6.4 ± 2.9	Filtered		LAS
RD-24	Primary	08/04/97	3.7 ± 3.2	5.9 ± 3.0	Filtered		LAS
RD-24	Primary	02/18/98	4.42 ± 2.0	8.05 ± 1.7	Filtered		TN
RD-24	Primary	05/05/98	3.63 ± 2.8	7.06 ± 2.1	Filtered		TN
RD-24	Primary	08/04/98	12.2 ± 9.5	11.0 ± 18	Filtered		TN
RD-24	Primary	02/02/99	4.53 ± 2.3	7.10 ± 2.6	Filtered		TN
RD-24	Primary	08/11/99	3.18 ± 2.0	7.07 ± 1.8	Filtered		TN
RD-24	Primary	02/03/00	4.87 ± 1.7	13.3 ± 2.0	Filtered		TR
RD-24	Primary	08/04/00	4.16 ± 2.0	6.26 ± 1.9	Filtered		TR
RD-24	Primary	02/06/01	4.84 ± 3.0	7.86 ± 2.1	Filtered		ES
RD-24	Primary	10/25/01	14.45 ± 4.88	5.14 ± 1.28	Filtered		DL
RD-24	Primary	02/25/02	5.44 ± 12.70	3.90 ± 11.26	Filtered		DL
RD-24	Primary	11/06/02	8.93 ± 3.3	8.16 ± 2.1	Filtered		ES
RD-24	Primary	02/12/03	2.83 ± 1.4	6.67 ± 1.3	Filtered		ES
RD-24	Primary	11/14/03	5.06 ± 3.4	9.29 ± 3.4	Filtered		ES
RD-24	Split	11/14/03	11.6 ± 4.56	13.3 ± 4.16	Filtered		STL
RD-25	Primary	09/12/89	4.2 ± 1.4	11.4 ± 0.4	Unfiltered		BC
RD-25	Split	09/12/89	0 ± 3	6 ± 2	Unfiltered		TMA
RD-25	Split	09/12/89	0 ± 4	5 ± 5	Unfiltered		TMA
RD-25	Primary	09/12/89	8.9 ± 1.7	56.1 ± 0.5	Filtered		BC
RD-25	Split	09/12/89	2 ± 3	3 ± 2	Filtered		TMA
RD-25	Split	09/12/89	0 ± 3	3 ± 4	Filtered		TMA
RD-25	Primary	09/12/89	3.4 ± 2.3	1.6 ± 1.1	Unfiltered		BC
RD-25	Primary	09/12/89	10.4 ± 2.4	3.7 ± 1.2	Filtered		BC
RD-25	Primary	10/20/89	6.0 ± 2.3	9.2 ± 0.7	Filtered		BC
RD-25	Primary	12/05/90	3.84 ± 3.17	6.77 ± 2.84	Filtered		IT
RD-25	Primary	03/06/91	2.16 ± 10.3	3.28 ± 1.17	Filtered		IT
RD-25	Primary	12/10/91	8.29 ± 4.23	5.87 ± 2.18	Filtered		IT
RD-25	Primary	03/06/92	3 ± 2	<3	Filtered		CEP
RD-25	Primary	03/17/93	7 ± 3	4 ± 3	Filtered		CEP
RD-25	Primary	02/28/94	9.8 ± 5.7	5.6 ± 3.8	Filtered		LAS
RD-25	Primary	08/17/94	10.1 ± 5.2	7.3 ± 4.4	Filtered		LAS
RD-25	Primary	02/09/95	46 ± 11	41.7 ± 6.4	Filtered		LAS
RD-25	Reanalysis of Primary	02/09/95	9.7 ± 5.3	13.0 ± 4.4	Filtered		LAS
RD-25	Primary	08/18/95	9.0 ± 5.1	8.5 ± 3.6	Filtered		LAS
RD-25	Primary	02/06/96	5.7 ± 3.4	3.8 ± 2.0	Filtered		LAS
RD-25	Primary	08/20/96	11.3 ± 5.6	9.6 ± 3.9	Filtered		LAS
RD-25	Primary	02/07/97	4.9 ± 3.7	6.0 ± 3.0	Filtered		LAS
RD-25	Primary	08/21/97	12.1 ± 5.9	7.6 ± 4.1	Filtered		LAS
RD-25	Primary	02/05/98	12.2 ± 3.8	7.55 ± 2.1	Filtered		TN
RD-25	Primary	08/18/98	3.13 ± 1.2	6.01 ± 1.5	Filtered		TN
RD-25	Primary	02/16/99	18.3 ± 5.2	9.37 ± 2.1	Filtered		TN
RD-25	Primary	08/19/99	2.96 ± 1.7	5.74 ± 1.7	Filtered		TN
RD-25	Primary	02/16/00	5.66 ± 3.1	3.64 ± 4.3	Filtered		TR

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-25	Primary	08/09/00	0.815 ± 1.5	5.33 ± 1.7	Filtered		TR
RD-25	Primary	02/07/01	4.60 ± 2.6	12.5 ± 2.2	Filtered		ES
RD-25	Primary	10/25/01	12.22 ± 4.97	6.17 ± 1.49	Filtered		DL
RD-25	Primary	03/07/02	6.00 ± 3.25	4.53 ± 1.37	Filtered		DL
RD-25	Primary	11/06/02	9.90 ± 3.6	7.83 ± 1.8	Filtered		ES
RD-25	Primary	02/24/03	3.92 ± 1.4	9.12 ± 1.9	Filtered		ES
RD-25	Primary	11/13/03	7.21 ± 4.2	7.19 ± 2.6	Filtered		ES
RD-26	Primary	09/26/89	11.8 ± 1.9	10.8 ± 0.7	Unfiltered		BC
RD-26	Primary	09/26/89	7.1 ± 1.5	9.2 ± 0.6	Filtered		BC
RD-26	Primary	10/20/89	8.9 ± 2.9	11.9 ± 0.8	Filtered		BC
RD-26	Primary	12/04/90	7.20 ± 4.33	2.90 ± 2.39	Filtered		IT
RD-26	Primary	03/07/91	12.9 ± 4.75	4.63 ± 2.54	Filtered		IT
RD-26	Primary	03/11/92	<2	<3	Filtered		CEP
RD-27	Primary	09/21/89	21.0 ± 2.8	13.1 ± 1.4	Unfiltered		BC
RD-27	Primary	09/21/89	13.7 ± 2.4	5.7 ± 1.3	Filtered		BC
RD-27	Primary	10/19/89	10.3 ± 2.8	9.6 ± 0.7	Filtered		BC
RD-27	Primary	12/04/90	6.79 ± 3.45	3.39 ± 2.43	Filtered		IT
RD-27	Primary	03/07/91	15.2 ± 10.3	7.91 ± 2.82	Filtered		IT
RD-27	Primary	06/08/91	5.75 ± 2.66	2.53 ± 1.18	Filtered		IT
RD-27	Primary	12/06/91	5.65 ± 2.67	9.70 ± 1.94	Filtered		IT
RD-27	Primary	03/09/92	<2	<3	Filtered		CEP
RD-27	Primary	03/08/93	5 ± 3	11 ± 4	Filtered		CEP
RD-27	Primary	02/28/94	5.8 ± 3	8.2 ± 2.6	Filtered		LAS
RD-27	Primary	08/18/94	3.6 ± 3.0	9.0 ± 2.9	Filtered		LAS
RD-27	Primary	02/17/95	23.7 ± 5.7	21.2 ± 3.0	Filtered		LAS
RD-27	Reanalysis of Primary	02/17/95	3.8 ± 2.6	9.5 ± 2.5	Filtered		LAS
RD-27	Primary	08/18/95	5.2 ± 2.9	6.4 ± 2.2	Filtered		LAS
RD-27	Primary	02/05/96	4.7 ± 3.1	8.4 ± 2.3	Filtered		LAS
RD-27	Primary	08/19/96	2.3 ± 2.7	6.7 ± 2.7	Filtered		LAS
RD-27	Primary	02/05/97	5.8 ± 3.1	8.4 ± 2.3	Filtered		LAS
RD-27	Primary	08/27/97	4.2 ± 3.5	5.2 ± 3.1	Filtered		LAS
RD-27	Primary	02/04/98	6.68 ± 2.2	8.62 ± 1.7	Filtered		TN
RD-27	Primary	08/07/98	8.47 ± 8.3	-19.0 ± 20	Filtered		TN
RD-27	Primary	02/16/99	4.86 ± 2.2	6.31 ± 1.9	Filtered		TN
RD-27	Primary	08/17/99	5.30 ± 1.9	6.66 ± 1.8	Filtered		TN
RD-27	Primary	02/21/00	4.92 ± 2.8	6.16 ± 4.1	Filtered		TR
RD-27	Primary	08/04/00	3.15 ± 2.0	4.88 ± 2.1	Filtered		TR
RD-27	Primary	02/14/01	4.27 ± 1.9	8.48 ± 4.1	Filtered		ES
RD-27	Primary	10/26/01	10.14 ± 3.64	7.46 ± 1.49	Filtered		DL
RD-27	Primary	03/06/02	5.25 ± 2.56	5.28 ± 1.38	Filtered		DL
RD-27	Primary	08/22/02	2.42 ± 3.0	4.47 ± 3.1	Filtered		ES
RD-27	Primary	05/14/03	4.43 ± 2.5	7.41 ± 3.0	Filtered		ES
RD-27	Primary	11/14/03	1.68 ± 1.7 (U)	6.79 ± 2.3	Filtered		ES
RD-27	Split	11/14/03	4.91 ± 2.29	7.05 ± 2.35	Filtered		STL

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-28	Primary	09/13/89	9.5 ± 1.3	18.3 ± 0.4	Unfiltered		BC
RD-28	Split	09/13/89	4 ± 3	7 ± 6	Unfiltered		TMA
RD-28	Primary	09/13/89	7.1 ± 1.3	16.1 ± 0.4	Filtered		BC
RD-28	Split	09/13/89	7 ± 4	14 ± 5	Filtered		TMA
RD-28	Primary	09/26/89	14.9 ± 2.6	9.4 ± 0.8	Unfiltered		BC
RD-28	Primary	09/26/89	10.4 ± 2.3	12.3 ± 0.7	Filtered		BC
RD-28	Primary	10/19/89	10.4 ± 3.4	8.5 ± 0.8	Filtered		BC
RD-28	Primary	03/27/90	9.60 ± 5.36	6.09 ± 2.73	Filtered		UST
RD-28	Primary	07/01/90	3.34 ± 3.90	8.19 ± 3.12	Filtered		UST
RD-28	Primary	09/16/90	4.94 ± 3.51	4.66 ± 2.52	Filtered		UST
RD-28	Primary	12/05/90	1.47 ± 6.11	5.38 ± 2.72	Filtered		IT
RD-28	Primary	03/06/91	9.62 ± 4.86	2.91 ± 1.14	Filtered		IT
RD-28	Split	12/10/91	<2	<3	Filtered		CEP
RD-28	Primary	12/10/91	10.5 ± 5.73	10.1 ± 2.87	Filtered		IT
RD-28	Primary	03/06/92	<2	<3	Filtered		CEP
RD-28	Split	03/06/92	17 ± 8	16 ± 4	Filtered		TEL
RD-28	Primary	03/17/93	9 ± 4	6 ± 4	Filtered		CEP
RD-28	Primary	08/05/93	6 ± 3	5 ± 3	Filtered		CEP
RD-28	Primary	02/24/94	24.7 ± 9.7	12.3 ± 7.2	Filtered		LAS
RD-28	Reanalysis of Primary	02/24/94	15.4 ± 7.3	16.7 ± 4.9	Filtered		LAS
RD-28	Primary	08/17/94	7.3 ± 4.6	6.8 ± 4.3	Filtered		LAS
RD-28	Primary	02/09/95	19.2 ± 7.1	10.2 ± 4.3	Filtered		LAS
RD-28	Reanalysis of Primary	02/09/95	15.2 ± 6.2	8.8 ± 4.4	Filtered		LAS
RD-28	Primary	08/18/95	17.1 ± 7.0	7.1 ± 4.1	Filtered		LAS
RD-28	Primary	02/06/96	17.2 ± 7.8	15.3 ± 4.6	Filtered		LAS
RD-28	Primary	08/20/96	23.9 ± 9.6	13.2 ± 5.3	Filtered		LAS
RD-28	Primary	02/06/97	12.2 ± 6.9	8.6 ± 4.4	Filtered		LAS
RD-28	Primary	08/28/97	28 ± 10	13.0 ± 6.6	Filtered		LAS
RD-28	Primary	02/05/98	24.7 ± 5.7	11.2 ± 2.0	Filtered		TN
RD-28	Primary	08/18/98	1.73 ± 0.98	8.56 ± 1.8	Filtered		TN
RD-28	Primary	02/16/99	14.0 ± 4.3	12.2 ± 1.9	Filtered		TN
RD-28	Primary	08/19/99	21.4 ± 5.5	14.4 ± 3.2	Filtered		TN
RD-28	Primary	02/16/00	15.0 ± 5.0	13.4 ± 4.3	Filtered		TR
RD-28	Primary	08/09/00	3.54 ± 4.1	28.7 ± 3.8	Filtered		TR
RD-28	Primary	02/07/01	5.82 ± 2.9	15.9 ± 2.0	Filtered		ES
RD-28	Primary	10/25/01	24.51 ± 7.0	8.26 ± 1.49	Filtered		DL
RD-28	Primary	02/25/02	29.36 ± 5.90	1.74 ± 0.42	Filtered		DL
RD-28	Primary	11/06/02	18.7 ± 5.7	10.3 ± 3.1	Filtered		ES
RD-28	Primary	02/24/03	11.9 ± 4.7	12.0 ± 3.9	Filtered		ES
RD-28	Primary	11/14/03	11.1 ± 6.5	15.4 ± 6.7	Filtered		ES
RD-29	Primary	09/20/89	-1.0 ± 0.9	22.3 ± 0.4	Unfiltered		BC
RD-29	Duplicate	09/20/89	36.5 ± 3.0	35.2 ± 1.6	Unfiltered		BC
RD-29	Primary	09/20/89	29.9 ± 3.0	37.3 ± 1.5	Filtered		BC
RD-29	Duplicate	09/20/89	30.0 ± 3.0	35.0 ± 1.5	Filtered		BC

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TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-29	Primary	10/18/89	20.9 ± 3.3	8.7 ± 1.1	Filtered		BC
RD-29	Primary	12/08/89	22.6 ± 6.21	6.55 ± 2.80	Unfiltered		UST
RD-29	Primary	12/08/89	18.6 ± 5.36	7.12 ± 2.86	Filtered		UST
RD-29	Primary	03/27/90	20.1 ± 7.35	9.85 ± 3.17	Filtered		UST
RD-29	Primary	06/30/90	15.3 ± 6.63	11.7 ± 3.28	Filtered		UST
RD-29	Primary	09/15/90	28.7 ± 8.06	5.10 ± 2.59	Filtered		UST
RD-29	Primary	12/06/90	11.9 ± 4.93	5.61 ± 2.69	Filtered		IT
RD-29	Duplicate	12/06/90	13.3 ± 4.83	7.19 ± 2.84	Filtered		IT
RD-29	Primary	03/05/91	29.1 ± 8.42	3.98 ± 1.24	Filtered		IT
RD-29	Primary	06/05/91	7.06 ± 2.99	4.51 ± 2.55	Filtered		IT
RD-29	Duplicate	06/05/91	7.00 ± 4.46	12.9 ± 3.47	Filtered		IT
RD-29	Primary	12/10/91	17.9 ± 6.42	12.5 ± 2.82	Filtered		IT
RD-29	Split	12/10/91	<2	<3	Filtered		CEP
RD-29	Primary	03/03/92	3 ± 2	5 ± 3	Filtered		CEP
RD-29	Primary	06/03/92	4 ± 2	1 ± 3	Filtered		CEP
RD-29	Primary	09/10/92	10 ± 3	21 ± 5	Filtered		CEP
RD-29	Primary	12/05/92	9 ± 3	12 ± 3	Filtered		CEP
RD-29	Primary	03/05/93	4 ± 3	7 ± 4	Filtered	Gross alpha: high statistics to large amount of solids.	CEP
RD-29	Primary	08/08/93	3 ± 2	4 ± 3	Filtered	Gross alpha: high statistics to large amount of solids.	CEP
RD-29	Primary	02/26/94	7.8 ± 4.8	8.1 ± 3.6	Filtered		LAS
RD-29	Primary	08/17/94	17.1 ± 6.5	8.3 ± 4.5	Filtered		LAS
RD-29	Primary	05/09/01	2.15 ± 2.8	3.99 ± 3.2	Filtered		ES
RD-29	Primary	05/03/02	22.79 ± 6.44	5.31 ± 1.15	Filtered		DL
RD-29	Primary	05/13/03	16.1 ± 5.5	9.76 ± 4.1	Filtered		ES
RD-30	Primary	09/22/89	22.8 ± 2.7	38.4 ± 1.3	Unfiltered		BC
RD-30	Primary	09/22/89	17.4 ± 2.4	33.2 ± 1.2	Filtered		BC
RD-30	Primary	10/19/89	8.5 ± 2.8	8.1 ± 0.8	Filtered		BC
RD-30	Primary	03/27/90	3.19 ± 2.74	5.19 ± 2.66	Filtered		UST
RD-30	Primary	06/29/90	5.24 ± 4.33	3.18 ± 2.42	Filtered		UST
RD-30	Primary	09/15/90	2.63 ± 2.15	4.88 ± 2.61	Filtered		UST
RD-30	Primary	12/06/90	4.71 ± 2.42	3.18 ± 2.46	Filtered		IT
RD-30	Primary	03/09/91	8.58 ± 4.74	6.12 ± 2.68	Filtered		IT
RD-30	Primary	12/06/91	11.9 ± 4.99	7.03 ± 2.24	Filtered		IT
RD-30	Primary	06/03/92	4 ± 2	1 ± 3	Filtered		CEP
RD-30	Split	06/03/92	10 ± 5	9.9 ± 2.7	Filtered		TEL
RD-30	Primary	03/21/93	<2	14 ± 3	Filtered		CEP
RD-30	Primary	02/26/94	4.8 ± 4.7	7.9 ± 3.9	Filtered		LAS
RD-30	Primary	08/09/94	4.6 ± 4.0	7.5 ± 3.5	Filtered		LAS
RD-30	Primary	02/08/95	10.2 ± 6.2	7.6 ± 4.5	Filtered		LAS
RD-30	Primary	08/19/95	5.5 ± 4.1	4.7 ± 3.2	Filtered		LAS
RD-30	Primary	02/28/96	5.6 ± 4.5	3.1 ± 3.3	Filtered		LAS
RD-30	Primary	08/20/96	7.0 ± 5.7	5.6 ± 3.8	Filtered		LAS
RD-30	Primary	02/25/97	12.1 ± 5.2	7.5 ± 3.1	Filtered		LAS
RD-30	Primary	08/27/97	13.6 ± 7.0	9.0 ± 5.2	Filtered		LAS

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TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-30	Primary	05/28/98	10.7 ± 3.6	8.29 ± 1.7	Filtered		TN
RD-30	Primary	08/05/98	9.20 ± 9.0	-2.84 ± 2.0	Filtered		TN
RD-30	Primary	02/05/99	6.46 ± 2.9	8.21 ± 2.7	Filtered		TN
RD-30	Primary	05/05/00	10.5 ± 3.6	7.54 ± 3.1	Filtered		TR
RD-30	Primary	08/08/00	7.63 ± 3.0	10.4 ± 2.8	Filtered		TR
RD-30	Primary	05/09/01	6.43 ± 3.0	9.48 ± 1.8	Filtered		ES
RD-30	Primary	11/09/01	14.72 ± 6.4	8.30 ± 1.97	Filtered		DL
RD-30	Primary	03/11/02	14.94 ± 4.10	5.03 ± 1.16	Filtered		DL
RD-30	Primary	08/30/02	10.8 ± 3.3	10.1 ± 2.2	Filtered		ES
RD-30	Primary	02/07/03	3.27 ± 1.6	7.0 ± 1.9	Filtered		ES
RD-30	Primary	11/14/03	8.30 ± 4.4	13.9 ± 4.2	Filtered		ES
RD-31	Primary	09/26/89	3.7 ± 0.8	7.4 ± 0.3	Unfiltered		BC
RD-31	Primary	09/26/89	3.6 ± 1.0	4.8 ± 0.3	Filtered		BC
RD-31	Primary	10/24/89	4.2 ± 2.1	1.4 ± 0.6	Filtered		BC
RD-31	Primary	12/05/90	2.07 ± 1.80	4.18 ± 2.56	Filtered		IT
RD-31	Primary	03/10/91	2.26 ± 1.66	1.02 ± 2.10	Filtered	Gross beta: high statistics due to large amount of solids.	IT
RD-31	Primary	03/05/92	<2	<3	Filtered		CEP
RD-33A	Primary	12/05/91	7.99 ± 3.19	8.10 ± 1.90	Filtered		IT
RD-33A	Primary	12/12/91	12.9 ± 4.01	7.13 ± 1.72	Filtered		IT
RD-33A	Split	12/12/91	<2	<3	Filtered		CEP
RD-33A	Primary	06/08/92	3 ± 2	-21/2 ± 3	Filtered	Gross beta: high statistics due to large amount of solids. Gross beta dissolved.	CEP
RD-33A	Primary	09/15/92	5 ± 2	7 ± 4	Filtered		CEP
RD-33A	Primary	12/05/92	<2	4 ± 3	Filtered		CEP
RD-33A	Primary	06/24/93	<2	<3	Filtered		CEP
RD-33A	Primary	08/24/93	<2	7 ± 3	Filtered		CEP
RD-33A	Primary	11/17/93	3.9 ± 2.8	7.2 ± 2.5	Filtered		LAS
RD-33A	Primary	02/27/94	4.9 ± 3.1	4.6 ± 2.1	Filtered		LAS
RD-33A	Primary	08/18/94	3.9 ± 2.8	5.7 ± 2.5	Filtered		LAS
RD-33A	Primary	02/07/95	1.8 ± 2.3	7.7 ± 2.4	Filtered		LAS
RD-33A	Primary	08/09/95	1.6 ± 1.9	5.8 ± 2.1	Filtered		LAS
RD-33A	Primary	02/19/96	6.7 ± 3.5	4.0 ± 2.2	Filtered		LAS
RD-33A	Primary	08/23/96	1.6 ± 2.4	4.2 ± 2.3	Filtered		LAS
RD-33A	Primary	02/25/97	7.6 ± 3.2	4.2 ± 1.8	Filtered		LAS
RD-33A	Primary	08/27/97	1.2 ± 2.2	8.6 ± 3.4	Filtered		LAS
RD-33A	Primary	05/27/98	7.38 ± 2.3	5.67 ± 1.8	Filtered		TN
RD-33A	Primary	08/17/98	1.50 ± 0.76	4.71 ± 1.4	Filtered		TN
RD-33A	Primary	02/03/99	3.16 ± 1.4	4.87 ± 1.7	Filtered		TN
RD-33A	Primary	02/09/00	5.26 ± 2.2	5.35 ± 2.2	Filtered		TR
RD-33A	Primary	05/14/01	1.70 ± 1.5	6.32 ± 1.5	Filtered		ES
RD-33A	Primary	02/15/02	3.13 ± 1.79	6.36 ± 1.55	Filtered		DL
RD-33A(Z4)	Primary	01/30/03	3.42 ± 2.1	5.38 ± 2.3	Filtered		ES
RD-33B	Primary	12/12/91	2.87 ± 2.16	7.53 ± 1.92	Filtered		IT
RD-33B	Split	12/12/91	<2	<3	Filtered		CEP

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-33B	Primary	06/24/92	1 ± 2	3 ± 3	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
RD-33B	Primary	09/15/92	0.1 ± 1.3	0.3 ± 3.0	Filtered		CEP
RD-33B	Primary	12/05/92	<2	9 ± 3	Filtered		CEP
RD-33B	Primary	06/24/93	<2	<3	Filtered		CEP
RD-33B	Primary	08/24/93	2 ± 1	4 ± 3	Filtered		CEP
RD-33B	Primary	11/17/93	1.1 ± 1.3	5.3 ± 1.6	Filtered		LAS
RD-33B	Primary	02/27/94	0.8 ± 1.8	4.9 ± 2	Filtered		LAS
RD-33B	Primary	08/18/94	0.7 ± 2.0	5.4 ± 3.0	Filtered		LAS
RD-33B	Primary	02/07/95	0 ± 1.8	5.7 ± 2.4	Filtered		LAS
RD-33B	Primary	08/09/95	1.5 ± 1.8	4.9 ± 1.9	Filtered		LAS
RD-33B	Primary	02/19/96	2.6 ± 2.4	4.5 ± 2.3	Filtered		LAS
RD-33B	Primary	08/23/96	-0.5 ± 1.5	6.8 ± 2.5	Filtered		LAS
RD-33B	Primary	02/25/97	1.2 ± 2.0	4.4 ± 1.7	Filtered		LAS
RD-33B	Primary	08/22/97	2.5 ± 2.2	5.8 ± 2.4	Filtered		LAS
RD-33B	Primary	05/27/98	1.44 ± 1.5	6.50 ± 1.5	Filtered		TN
RD-33B	Primary	08/17/98	0.004 ± 0.34	4.31 ± 1.5	Filtered		TN
RD-33B	Primary	02/03/99	1.86 ± 1.4	3.80 ± 1.4	Filtered		TN
RD-33B	Primary	02/09/00	2.31 ± 1.8	5.24 ± 3.2	Filtered		TR
RD-33B	Primary	02/17/01	1.73 ± 1.6	4.68 ± 1.7	Filtered		ES
RD-33B	Primary	02/15/02	3.19 ± 2.09	2.78 ± 1.31	Filtered		DL
RD-33B	Primary	02/11/03	0.527 ± 0.75	4.94 ± 1.1	Filtered		ES
RD-33C	Primary	12/05/91	4.19 ± 2.34	7.42 ± 1.79	Filtered		IT
RD-33C	Primary	12/12/91	1.91 ± 1.82	6.15 ± 1.75	Filtered		IT
RD-33C	Split	12/12/91	-6	2 ± 4	Filtered		CEP
RD-33C	Primary	06/08/92	1 ± 1	-3 ± 3	Filtered		CEP
RD-33C	Primary	09/15/92	2 ± 2	2 ± 3	Filtered		CEP
RD-33C	Primary	12/05/92	<2	4 ± 3	Filtered		CEP
RD-33C	Primary	06/24/93	2 ± 1	7 ± 3	Filtered		CEP
RD-33C	Primary	08/24/93	2 ± 1	8 ± 3	Filtered		CEP
RD-33C	Primary	11/17/93	2.3 ± 2.6	5.8 ± 2.5	Filtered		LAS
RD-33C	Primary	02/27/94	0.3 ± 2.2	6.4 ± 2.3	Filtered		LAS
RD-33C	Primary	08/17/94	2.1 ± 2.8	4.4 ± 3.4	Filtered		LAS
RD-33C	Primary	02/07/95	4.4 ± 3.2	4.2 ± 2.6	Filtered		LAS
RD-33C	Primary	08/09/95	2.6 ± 2.4	6.1 ± 2.3	Filtered		LAS
RD-33C	Primary	02/19/96	6.5 ± 3.4	4.0 ± 2.2	Filtered		LAS
RD-33C	Primary	08/22/96	-0.7 ± 1.8	4.9 ± 2.8	Filtered		LAS
RD-33C	Primary	02/25/97	3.1 ± 2.5	6.9 ± 2.1	Filtered		LAS
RD-33C	Primary	08/21/97	4.3 ± 2.9	5.0 ± 2.7	Filtered		LAS
RD-33C	Primary	05/27/98	5.82 ± 2.2	5.99 ± 1.6	Filtered		TN
RD-33C	Primary	08/17/98	1.57 ± 0.86	3.72 ± 1.6	Filtered		TN
RD-33C	Primary	02/03/99	3.40 ± 1.7	5.55 ± 1.6	Filtered		TN
RD-33C	Primary	02/09/00	3.50 ± 2.4	6.98 ± 2.6	Filtered		TR
RD-33C	Primary	02/17/01	4.71 ± 2.2	6.91 ± 1.6	Filtered		ES
RD-33C	Primary	02/15/02	4.29 ± 2.45	3.45 ± 1.34	Filtered		DL

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-33C	Primary	02/10/03	0.201 ± 1.5	5.34 ± 2.0	Filtered		ES
RD-34A	Primary	12/05/91	22.1 ± 7.98	15.9 ± 3.56	Filtered		IT
RD-34A	Split	12/05/91	<2	<3	Filtered		CEP
RD-34A	Primary	03/10/92	6 ± 3	5 ± 3	Filtered		CEP
RD-34A	Split	03/10/92	28 ± 11	22 ± 4	Filtered		TEL
RD-34A	Primary	06/08/92	6 ± 2	-2 ± 3	Filtered		CEP
RD-34A	Primary	09/13/92	6 ± 3	8 ± 4	Filtered		CEP
RD-34A	Reanalysis of Primary	09/13/92	21 ± 14	28 ± 8	Filtered		BL
RD-34A	Split	09/13/92	33 ± 12	14 ± 8	Filtered		BL
RD-34A	Reanalysis of Primary	09/13/92	6 ± 3	19 ± 3	Filtered		CEP
RD-34A	Primary	12/05/92	7 ± 3	6 ± 3	Filtered		CEP
RD-34A	Split	12/05/92	31 ± 11	18 ± 6	Filtered		BL
RD-34A	Reanalysis of Primary	12/05/92	16 ± 11	21 ± 7	Filtered		BL
RD-34A	Primary	03/09/93	11 ± 5	11 ± 4	Filtered		CEP
RD-34A	Primary	06/22/93	7 ± 4	20 ± 4	Filtered		CEP
RD-34A	Primary	08/24/93	7 ± 3	11 ± 3	Filtered		CEP
RD-34A	Primary	11/18/93	12.5 ± 7.0	8.1 ± 5.5	Filtered		LAS
RD-34A	Primary	02/26/94	18.8 ± 8.2	8.7 ± 5.3	Filtered		LAS
RD-34A	Reanalysis of Primary	02/26/94	10.4 ± 6.3	21.5 ± 6.6	Filtered		LAS
RD-34A	Primary	08/09/94	14.6 ± 7.0	9.2 ± 4.3	Filtered		LAS
RD-34A	Primary	02/07/95	10.8 ± 7.3	13.5 ± 7.1	Filtered		LAS
RD-34A	Primary	08/09/95	15.5 ± 7.0	12.8 ± 5.1	Filtered		LAS
RD-34A	Primary	02/19/96	13.4 ± 6.2	9.9 ± 3.6	Filtered		LAS
RD-34A	Primary	08/18/96	4.5 ± 5.9	15.5 ± 5.7	Filtered		LAS
RD-34A	Primary	02/07/97	17.0 ± 7.9	9.7 ± 4.8	Filtered		LAS
RD-34A	Primary	05/27/98	21.5 ± 5.2	10.5 ± 2.0	Filtered		TN
RD-34A	Primary	08/18/98	5.97 ± 1.5	10.3 ± 1.7	Filtered		TN
RD-34A	Primary	05/09/01	7.97 ± 3.2	14.8 ± 2.0	Filtered		ES
RD-34A	Primary	05/16/03	18.5 ± 7.0	12.1 ± 5.1	Filtered		ES
RD-34B	Primary	12/05/91	3.76 ± 2.43	5.52 ± 1.86	Filtered		IT
RD-34B	Primary	03/10/92	<2	4 ± 3	Filtered		CEP
RD-34B	Split	03/10/92	<6	9.5 ± 3.1	Filtered		TEL
RD-34B	Primary	06/08/92	1 ± 2	-2 ± 3	Filtered		CEP
RD-34B	Primary	09/13/92	3 ± 2	8 ± 4	Filtered		CEP
RD-34B	Split	09/13/92	9.7 ± 6.8	17 ± 7	Filtered		BL
RD-34B	Primary	12/05/92	<2	4 ± 3	Filtered		CEP
RD-34B	Primary	03/09/93	9 ± 4	13 ± 4	Filtered		CEP
RD-34B	Primary	06/23/93	3 ± 2	13 ± 4	Filtered		CEP
RD-34B	Primary	08/24/93	<2	6 ± 3	Filtered		CEP
RD-34B	Primary	11/18/93	0.2 ± 2.3	8.5 ± 3.8	Filtered		LAS
RD-34B	Primary	02/26/94	1 ± 2.5	5.8 ± 2.6	Filtered		LAS
RD-34B	Primary	08/09/94	4.9 ± 3.7	7.0 ± 3.4	Filtered		LAS
RD-34B	Primary	02/07/95	0.5 ± 2.3	5.4 ± 2.8	Filtered		LAS
RD-34B	Primary	08/09/95	2.7 ± 3.1	11.2 ± 3.7	Filtered		LAS

Gross alpha: high statistics due to large amount of solids.

See last page of Table E-I for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-34B	Primary	02/19/96	5.2 ± 3.5	6.6 ± 2.4	Filtered		LAS
RD-34B	Primary	08/18/96	2.3 ± 3.3	6.0 ± 3.3	Filtered		LAS
RD-34B	Primary	02/07/97	5.4 ± 3.5	6.3 ± 2.7	Filtered		LAS
RD-34B	Primary	08/21/97	9.3 ± 4.6	6.4 ± 3.3	Filtered		LAS
RD-34B	Primary	05/27/98	12.8 ± 4.1	13.2 ± 2.0	Filtered		TN
RD-34B	Primary	08/18/98	1.26 ± 0.76	5.29 ± 1.7	Filtered		TN
RD-34B	Primary	02/04/99	7.65 ± 3.2	8.57 ± 2.3	Filtered		TN
RD-34B	Primary	02/05/00	5.25 ± 1.6	7.99 ± 2.0	Filtered		TR
RD-34B	Primary	02/16/01	3.85 ± 2.3	5.59 ± 1.9	Filtered		ES
RD-34B	Primary	02/15/02	3.80 ± 2.64	7.89 ± 1.79	Filtered		DL
RD-34B	Primary	02/06/03	2.37 ± 2.0	6.78 ± 2.3	Filtered		ES
RD-34C	Primary	12/06/91	1.01 ± 1.18	3.76 ± 1.34	Filtered		IT
RD-34C	Primary	03/10/92	<2	6 ± 3	Filtered		CEP
RD-34C	Split	03/10/92	<4	6.7 ± 2.6	Filtered		TEL
RD-34C	Primary	06/08/92	1 ± 1	4 ± 3	Filtered		CEP
RD-34C	Primary	09/13/92	0.9 ± 1.9	6 ± 4	Filtered		CEP
RD-34C	Split	09/13/92	2.9 ± 5.2	15 ± 5	Filtered		BL
RD-34C	Primary	12/05/92	<2	<3	Filtered		CEP
RD-34C	Primary	03/09/93	5 ± 3	7 ± 4	Filtered		CEP
RD-34C	Primary	06/24/93	<2	<3	Filtered		CEP
RD-34C	Primary	08/24/93	<2	<3	Filtered		CEP
RD-34C	Primary	11/06/93	1.6 ± 1.9	3.7 ± 2.1	Filtered		LAS
RD-34C	Primary	02/26/94	1.6 ± 2.1	5.2 ± 2.2	Filtered		LAS
RD-34C	Primary	08/09/94	2.8 ± 2.3	5.3 ± 2.0	Filtered		LAS
RD-34C	Primary	02/07/95	2.7 ± 2.4	4.2 ± 2.4	Filtered		LAS
RD-34C	Primary	08/10/95	2.3 ± 2.1	3.7 ± 2.0	Filtered		LAS
RD-34C	Primary	02/19/96	2.3 ± 2.2	4.0 ± 1.5	Filtered		LAS
RD-34C	Primary	08/19/96	0.5 ± 1.9	4.9 ± 2.2	Filtered		LAS
RD-34C	Primary	02/07/97	3.4 ± 2.2	5.0 ± 1.7	Filtered		LAS
RD-34C	Primary	08/21/97	4.2 ± 2.7	7.3 ± 2.6	Filtered		LAS
RD-34C	Primary	05/27/98	2.40 ± 1.6	4.67 ± 1.4	Filtered		TN
RD-34C	Primary	08/17/98	1.08 ± 0.68	3.73 ± 1.4	Filtered		TN
RD-34C	Primary	02/04/99	1.59 ± 1.6	2.72 ± 2.5	Filtered		TN
RD-34C	Primary	02/05/00	0.866 ± 1.5	4.64 ± 2.8	Filtered		TR
RD-34C	Primary	02/16/01	2.21 ± 1.6	9.80 ± 1.9	Filtered		ES
RD-34C	Primary	02/14/02	2.17 ± 1.86	4.40 ± 1.53	Filtered		DL
RD-34C	Primary	02/06/03	1.84 ± 1.2	3.28 ± 1.7	Filtered		ES
RD-35B	Primary	05/07/99	22.8 ± 4.4	12.6 ± 2.0	Filtered		TN
RD-35B	Primary	08/18/99	1.56 ± 1.2	4.05 ± 1.6	Filtered		TN
RD-38B	Primary	02/17/99	1.52 ± 2.0	4.98 ± 1.6	Filtered		TN
RD-45C	Primary	10/06/94	2.6 ± 1.9	4.4 ± 2.0	Filtered		LAS
RD-46B	Primary	02/15/99	3.26 ± 2.0	3.74 ± 1.6	Filtered		TN
RD-50	Primary	05/05/94	24.9 ± 6.9	10.2 ± 3.9	Filtered		LAS
RD-50	Reanalysis of Primary	05/05/94	9.6 ± 4.7	6 ± 3.6	Filtered		LAS

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-50	Primary	05/19/95	11.8 ± 5.5	5.4 ± 3.9	Filtered		LAS
RD-50	Primary	05/14/96	31.9 ± 6.6	10.7 ± 2.6	Filtered		LAS
RD-50	Primary	05/05/97	7.0 ± 3.6	7.5 ± 2.7	Filtered		LAS
RD-50	Primary	05/28/98	8.45 ± 4.1	5.92 ± 1.7	Filtered		TN
RD-51C	Primary	12/14/91	1.18 ± 2.30	2.93 ± 1.91	Filtered		IT
RD-51C	Primary	03/06/92	<2	<3	Filtered		CEP
RD-54A	Primary	09/12/93	<2	<3	Filtered		CEP
RD-54A	Primary	09/29/93	<2	<3	Filtered		CEP
RD-54A	Primary	05/08/94	5 ± 3.6	7.1 ± 3.9	Filtered		LAS
RD-54A	Primary	08/09/94	1.4 ± 2.6	6.2 ± 2.8	Filtered		LAS
RD-54A	Primary	08/03/95	4.9 ± 2.5	6.6 ± 2.0	Filtered		LAS
RD-54A	Primary	05/16/96	11.0 ± 5.3	7.4 ± 3.8	Filtered		LAS
RD-54A	Primary	08/23/96	2.5 ± 3.7	1.5 ± 3.3	Filtered		LAS
RD-54A	Primary	05/05/97	0.5 ± 1.9	1.4 ± 2.0	Filtered		LAS
RD-54A	Primary	08/22/97	16.9 ± 5.3	4.7 ± 2.7	Filtered		LAS
RD-54A	Primary	02/08/98	1.56 ± 1.3	4.49 ± 1.5	Filtered		TN
RD-54A	Primary	08/07/98	0.051 ± 7.9	4.83 ± 17	Filtered		TN
RD-54A	Primary	02/08/99	22.2 ± 12	58.0 ± 7.4	Filtered		TN
RD-54A	Primary	03/15/00	7.08 ± 2.9	6.84 ± 2.3	Filtered		TR
RD-54A	Primary	10/26/01	20.14 ± 4.71	6.03 ± 1.17	Filtered		DL
RD-54A	Primary	02/27/02	7.80 ± 2.71	1.82 ± 0.70	Filtered		DL
RD-54A(Z2)	Primary	02/18/03	5.39 ± 1.8	9.08 ± 2.6	Filtered		ES
RD-54B	Primary	09/12/93	5 ± 2	13 ± 4	Filtered		CEP
RD-54B	Primary	09/29/93	<2	4 ± 3	Filtered		CEP
RD-54B	Primary	05/08/94	4.7 ± 5.2	9.5 ± 5.1	Filtered		LAS
RD-54B	Primary	08/08/94	2.5 ± 4.2	5.9 ± 4.1	Filtered		LAS
RD-54B	Primary	08/30/95	4.6 ± 5.0	4.6 ± 4.3	Filtered		LAS
RD-54B	Primary	05/16/96	5.8 ± 5.6	10.9 ± 5.6	Filtered		LAS
RD-54B	Primary	08/23/96	0.8 ± 3.4	7.5 ± 3.7	Filtered		LAS
RD-54B	Primary	08/22/97	5.9 ± 4.0	5.7 ± 3.0	Filtered		LAS
RD-54B	Primary	02/08/98	1.42 ± 1.2	7.00 ± 1.7	Filtered		TN
RD-54B	Primary	08/07/98	-1.66 ± 4.2	-14.0 ± 22	Filtered		TN
RD-54B	Primary	02/08/99	1.44 ± 3.7	17.2 ± 4.4	Filtered		TN
RD-54B	Primary	03/15/00	1.05 ± 1.2	0.622 ± 2.2	Filtered		TR
RD-54B	Primary	10/25/01	7.40 ± 3.30	2.88 ± 1.14	Filtered		DL
RD-54B	Primary	02/27/02	2.59 ± 1.9	4.4 ± 1.5	Filtered		DL
RD-54B	Primary	02/26/03	5.38 ± 1.8	7.36 ± 2.2	Filtered		ES
RD-54C	Primary	09/11/93	6 ± 3	10 ± 3	Filtered		CEP
RD-54C	Primary	09/29/93	<2	<3	Filtered		CEP
RD-54C	Primary	05/08/94	1.9 ± 1.8	2.9 ± 1.7	Filtered		LAS
RD-54C	Primary	08/08/94	0.8 ± 1.5	2.7 ± 1.4	Filtered		LAS
RD-54C	Primary	08/30/95	1.3 ± 1.7	4.3 ± 1.6	Filtered		LAS
RD-54C	Primary	05/16/96	3.4 ± 1.4	4.0 ± 1.5	Filtered		LAS
RD-54C	Primary	08/23/96	0.7 ± 1.4	3.2 ± 1.5	Filtered		LAS

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TABLE E-I
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-54C	Primary	05/05/97	1.4 ± 1.4	2.0 ± 1.4	Filtered		LAS
RD-54C	Primary	08/24/97	-0.18 ± 0.74	1.4 ± 1.3	Filtered		LAS
RD-54C	Primary	02/08/98	0.349 ± 0.63	2.36 ± 1.3	Filtered		TN
RD-54C	Primary	08/07/98	-1.41 ± 6.2	-6.31 ± 16	Filtered		TN
RD-54C	Primary	02/09/99	-0.998 ± 1.4	7.69 ± 3.3	Filtered		TN
RD-54C	Primary	03/15/00	0.652 ± 1.3	4.04 ± 2.5	Filtered		TR
RD-54C	Primary	11/02/01	2.23 ± 1.54	2.07 ± 1.10	Filtered		DL
RD-54C	Primary	02/27/02	1.77 ± 1.38	1.27 ± 1.01	Filtered		DL
RD-54C	Primary	02/26/03	1.90 ± 1.1	5.32 ± 1.8	Filtered		ES
RD-56A	Primary	05/10/94	3.9 ± 4.5	9.3 ± 5.2	Filtered		LAS
RD-56A	Primary	02/20/96	4.1 ± 3.4	3.7 ± 2.2	Filtered		LAS
RD-56A	Primary	02/06/97	5.5 ± 4.4	6.2 ± 3.6	Filtered		LAS
RD-56A	Primary	05/28/98	3.82 ± 2.3	5.45 ± 1.5	Filtered		TN
RD-56B	Primary	05/28/98	3.53 ± 2.0	6.17 ± 1.5	Filtered		TN
RD-57	Primary	03/16/94	5.2 ± 3.1	4.1 ± 2.3	Filtered		LAS
RD-57	Primary	05/10/94	2.3 ± 2.2	5.4 ± 2.5	Filtered		LAS
RD-57	Primary	08/18/94	2.8 ± 2.7	8.6 ± 3.2	Filtered		LAS
RD-57	Primary	02/07/95	1.3 ± 2.1	4.8 ± 2.4	Filtered		LAS
RD-57	Primary	08/09/95	4.2 ± 2.7	6.1 ± 2.5	Filtered		LAS
RD-57	Primary	02/19/96	3.8 ± 3.0	5.4 ± 1.7	Filtered		LAS
RD-57	Primary	08/22/96	2.4 ± 4.5	5.3 ± 4.1	Filtered		LAS
RD-57	Primary	02/25/97	6.5 ± 3.1	6.2 ± 2.1	Filtered		LAS
RD-57	Primary	08/27/97	6.2 ± 3.5	5.6 ± 2.9	Filtered		LAS
RD-57	Primary	05/26/98	4.96 ± 2.0	5.43 ± 1.7	Filtered		TN
RD-57	Primary	08/17/98	0.975 ± 0.64	4.40 ± 1.5	Filtered		TN
RD-57	Primary	05/13/99	2.84 ± 1.6	3.90 ± 1.8	Filtered		TN
RD-57	Primary	02/09/00	1.92 ± 1.1	5.16 ± 2.0	Filtered		TR
RD-57	Primary	05/11/01	1.46 ± 1.5	4.40 ± 1.4	Filtered		ES
RD-57	Primary	02/14/02	2.54 ± 1.46	3.15 ± 1.23	Filtered		DL
RD-57	Primary	01/29/03	2.68 ± 1.7	4.31 ± 2.6	Filtered		ES
RD-57(Z8)	Primary	04/30/03	3.06 ± 1.9	6.07 ± 2.2	Filtered		ES
RD-59A	Primary	08/16/94	3.6 ± 3.7	6.2 ± 4.1	Filtered		LAS
RD-59A	Primary	02/06/95	0.8 ± 2.9	2.9 ± 3.3	Filtered		LAS
RD-59A	Duplicate	02/06/95	-5.5 ± 7.3	2 ± 20	Filtered		LAS
RD-59A	Primary	08/08/95	4.8 ± 4.3	7.4 ± 3.6	Filtered		LAS
RD-59A	Primary	03/12/96	3.3 ± 4.1	4.7 ± 3.3	Filtered		LAS
RD-59A	Primary	08/21/96	0.3 ± 3.3	5.5 ± 3.8	Filtered		LAS
RD-59A	Primary	02/16/97	2.0 ± 3.4	7.4 ± 3.6	Filtered		LAS
RD-59A	Primary	08/22/97	0.9 ± 3.8	3.2 ± 4.0	Filtered		LAS
RD-59A	Primary	08/19/98	1.02 ± 0.73	4.35 ± 1.7	Filtered		TN
RD-59A	Primary	02/16/99	3.17 ± 2.4	4.96 ± 1.9	Filtered		TN
RD-59A	Primary	03/14/00	2.84 ± 2.1	3.83 ± 2.5	Filtered		TR
RD-59A	Primary	05/16/01	0.724 ± 2.2	6.00 ± 1.6	Filtered		ES
RD-59A	Primary	02/28/02	2.03 ± 1.75	3.06 ± 1.36	Filtered		DL

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-59A	Primary	01/31/03	1.81 ± 1.8	4.95 ± 2.4	Filtered		ES
RD-59A	Primary	05/15/03	3.55 ± 2.0	7.58 ± 2.8	Filtered		ES
RD-59A	Split	05/15/03	3.53 ± 1.9	14 ± 3.9	Filtered		STL
RD-59B	Primary	08/16/94	0.5 ± 2.2	4.8 ± 3.4	Filtered		LAS
RD-59B	Primary	02/06/95	1.1 ± 2.7	6.0 ± 2.8	Filtered		LAS
RD-59B	Primary	08/08/95	3.3 ± 2.9	4.9 ± 2.5	Filtered		LAS
RD-59B	Primary	03/12/96	0.6 ± 2.5	4.7 ± 2.4	Filtered		LAS
RD-59B	Primary	08/21/96	-0.2 ± 2.7	4.7 ± 2.8	Filtered		LAS
RD-59B	Primary	02/16/97	4.5 ± 3.5	6.7 ± 2.9	Filtered		LAS
RD-59B	Primary	08/22/97	3.5 ± 3.2	5.3 ± 3.0	Filtered		LAS
RD-59B	Primary	08/19/98	0.127 ± 0.44	3.41 ± 1.4	Filtered		TN
RD-59B	Primary	02/16/99	4.38 ± 2.3	5.32 ± 1.6	Filtered		TN
RD-59B	Primary	03/14/00	3.27 ± 2.2	3.46 ± 2.0	Filtered		TR
RD-59B	Primary	02/17/01	2.27 ± 2.2	4.17 ± 1.5	Filtered		ES
RD-59B	Primary	02/28/02	1.58 ± 1.38	1.58 ± 1.28	Filtered		DL
RD-59B	Primary	01/31/03	1.52 ± 1.8	3.58 ± 2.2	Filtered		ES
RD-59C	Primary	08/16/94	1.9 ± 2.4	4.1 ± 2.9	Filtered		LAS
RD-59C	Primary	02/06/95	2.2 ± 2.9	3.7 ± 2.8	Filtered		LAS
RD-59C	Primary	08/08/95	0.9 ± 2.2	3.2 ± 2.5	Filtered		LAS
RD-59C	Primary	03/12/96	0.2 ± 3.5	4.6 ± 2.5	Filtered		LAS
RD-59C	Primary	08/21/96	1.3 ± 2.7	3.1 ± 2.7	Filtered		LAS
RD-59C	Primary	02/16/97	4.0 ± 3.6	3.1 ± 2.6	Filtered		LAS
RD-59C	Primary	08/22/97	1.6 ± 2.6	2.8 ± 3.2	Filtered		LAS
RD-59C	Primary	08/19/98	0.193 ± 0.43	2.20 ± 1.4	Filtered		TN
RD-59C	Primary	02/16/99	0.660 ± 1.5	5.17 ± 1.8	Filtered		TN
RD-59C	Primary	03/14/00	0.518 ± 1.5	4.63 ± 2.2	Filtered		TR
RD-59C	Primary	02/17/01	1.11 ± 1.7	4.17 ± 1.5	Filtered		ES
RD-59C	Primary	02/28/02	0.23 ± 1.68	1.84 ± 1.92	Filtered		DL
RD-59C	Primary	01/31/03	2.04 ± 1.8	3.54 ± 1.9	Filtered		ES
RD-61	Primary	05/28/98	2.72 ± 1.8	3.58 ± 1.7	Filtered		TN
RD-63	Primary	09/22/94	12.9 ± 5.6	10.3 ± 4.6	Filtered	Pilot extraction effluent.	LAS
RD-63	Primary	10/06/94	4.7 ± 4.1	9.4 ± 4.1	Filtered		LAS
RD-63	Primary	11/09/94	14.4 ± 5.7	10.9 ± 3.8	Filtered		LAS
RD-63	Primary	01/04/95	8.7 ± 5.2	7.7 ± 4.1	Filtered		LAS
RD-63	Primary	02/02/99	17.6 ± 5.3	19.1 ± 3.0	Filtered		TN
RD-63	Primary	02/16/00	9.95 ± 4.1	9.70 ± 4.2	Filtered		TR
RD-63	Primary	02/23/01	13.7 ± 3.7	7.73 ± 1.9	Filtered		ES
RD-63	Primary	02/14/02	9.48 ± 3.51	8.14 ± 1.64	Filtered		DL
RD-63	Primary	02/05/03	6.08 ± 1.7	9.06 ± 1.3	Filtered		ES
RD-64	Primary	05/10/01	3.98 ± 2.6	8.63 ± 2.0	Filtered		ES
RD-64	Primary	02/28/02	5.10 ± 2.67	5.93 ± 1.10	Filtered		DL
RD-64(Z6)	Primary	01/29/03	3.90 ± 2.2	6.68 ± 2.1	Filtered		ES
RD-65	Primary	02/27/97	0.3 ± 1.7	0.5 ± 1.8	Filtered		LAS
RD-65	Primary	02/07/98	2.24 ± 1.3	4.39 ± 1.6	Filtered		TN

See last page of Table E-1 for footnotes and explanations.

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TABLE E-I

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
RD-69	Primary	05/28/98	2.33 ± 1.8	3.80 ± 1.4	Filtered		TN
RD-74	Primary	05/13/99	8.82 ± 3.4	5.29 ± 1.9	Filtered		TN
HAR-06	Primary	06/02/89	15.5 ± 3.7	12.1 ± 0.8	Unfiltered		BC
HAR-06	Primary	07/22/89	9.2 ± 2.0	11.9 ± 0.6	Unfiltered, Decanted		BC
HAR-06	Primary	09/14/89	9.4 ± 4.2	20.0 ± 1.6	Unfiltered		BC
HAR-06	Primary	09/14/89	4.6 ± 3.8	18.7 ± 1.4	Filtered		BC
HAR-07	Primary	06/05/89	9.2 ± 4.3	4.2 ± 0.9	Unfiltered		BC
HAR-07	Primary	07/25/89	1.6 ± 1.5	13.1 ± 0.6	Unfiltered, Decanted		BC
HAR-07	Primary	09/09/89	6.0 ± 1.8	10.0 ± 0.3	Unfiltered		BC
HAR-07	Primary	09/09/89	4.0 ± 1.5	6.0 ± 0.3	Filtered		BC
HAR-07	Primary	03/15/93	<2	<3	Filtered		CEP
HAR-07	Primary	06/09/93	4 ± 3	5 ± 4	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
HAR-07	Primary	08/09/93	5 ± 2	18 ± 4	Filtered		CEP
HAR-07	Primary	11/04/93	4.1 ± 3.2	4.5 ± 3.2	Filtered		LAS
HAR-08	Primary	06/07/89	-1.0 ± 1.5	1.9 ± 0.5	Unfiltered		BC
HAR-08	Primary	07/23/89	-1.0 ± 1.2	-1.0 ± 0.3	Unfiltered, Decanted		BC
HAR-16	Primary	06/05/89	4.2 ± 1.9	1.7 ± 0.8	Unfiltered		BC
HAR-16	Primary	07/25/89	4.6 ± 1.9	5.4 ± 0.8	Unfiltered, Decanted		BC
HAR-16	Primary	09/09/89	2.1 ± 1.3	4.5 ± 0.4	Unfiltered		BC
HAR-16	Primary	09/09/89	1.0 ± 1.1	3.6 ± 0.3	Filtered		BC
HAR-16	Primary	03/15/93	<2	<3	Filtered		CEP
HAR-16	Primary	06/09/93	3 ± 2	7 ± 4	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
HAR-16	Primary	08/09/93	<2	<3	Filtered		CEP
HAR-16	Primary	11/22/93	-0.5 ± 2.0	3.0 ± 2.5	Filtered		LAS
HAR-17	Primary	06/04/89	7.3 ± 2.5	2.3 ± 0.6	Unfiltered		BC
HAR-17	Primary	07/23/89	4.7 ± 1.7	4.6 ± 0.5	Unfiltered, Decanted		BC
HAR-17	Primary	06/28/90	7.88 ± 5.95	5.39 ± 2.80	Filtered		UST
HAR-17	Primary	03/17/93	7 ± 5	4 ± 3	Filtered		CEP
HAR-17	Primary	06/09/93	3 ± 2	12 ± 4	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
HAR-17	Primary	08/09/93	<2	<3	Filtered		CEP
HAR-17	Primary	11/08/93	2.9 ± 3.4	4.1 ± 4.2	Filtered		LAS
HAR-18	Primary	06/05/89	11.8 ± 4.4	9.5 ± 1.1	Unfiltered		BC
HAR-18	Primary	07/25/89	8.6 ± 2.6	16.7 ± 1.0	Unfiltered, Decanted		BC
HAR-18	Primary	09/11/89	21.6 ± 4.7	14.0 ± 1.9	Unfiltered		BC
HAR-18	Primary	09/11/89	16.5 ± 4.5	20.1 ± 1.7	Filtered		BC
HAR-18	Primary	05/08/94	19.1 ± 7.2	9.7 ± 4.5	Filtered		LAS
HAR-19	Primary	09/09/89	10.0 ± 2.1	11.0 ± 0.5	Unfiltered		BC
HAR-19	Primary	09/09/89	6.0 ± 1.9	12.0 ± 0.4	Filtered		BC
HAR-20	Primary	09/09/89	20.0 ± 2.9	13.0 ± 0.72	Unfiltered		BC
HAR-20	Primary	09/09/89	12.0 ± 2.6	9.0 ± 0.6	Filtered		BC
HAR-21	Primary	09/09/89	15.0 ± 2.5	19.0 ± 0.9	Unfiltered		BC
HAR-21	Primary	09/09/89	11.0 ± 2.1	11.0 ± 0.7	Filtered		BC
HAR-23	Primary	06/02/89	-1.0 ± 3.8	7.7 ± 0.8	Unfiltered		BC
HAR-23	Primary	07/22/89	4.2 ± 1.6	8.0 ± 0.3	Unfiltered, Decanted		BC

See last page of Table E-I for footnotes and explanations.

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TABLE E-1
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
HAR-26	Primary	07/22/89	2.6 ± 1.4	3.3 ± 0.5	Unfiltered, Decanted		BC
HAR-26	Primary	02/23/94	0.8 ± 2.4	3.9 ± 2.7	Filtered		LAS
HAR-26	Primary	08/15/94	0.2 ± 2.5	3.8 ± 3.2	Filtered		LAS
WS-04A	Primary	06/03/89	9.9 ± 2.5	5.8 ± 0.7	Unfiltered		BC
WS-04A	Primary	07/23/89	-1.0 ± 1.5	7.1 ± 0.4	Unfiltered, Decanted		BC
WS-04A	Primary	09/09/89	5.6 ± 1.9	12.4 ± 0.6	Unfiltered		BC
WS-04A	Primary	09/09/89	2.1 ± 1.5	7.8 ± 0.5	Filtered		BC
WS-04A	Primary	12/06/90	2.18 ± 2.79	5.90 ± 2.66	Filtered		IT
WS-04A	Primary	03/18/93	<2	5 ± 2	Filtered		CEP
WS-04A	Primary	06/10/93	4 ± 3	9 ± 4	Filtered	Gross alpha: high statistics due to large amount of solids.	CEP
WS-04A	Primary	08/23/93	<2	8 ± 3	Filtered		CEP
WS-04A	Primary	11/04/93	1.3 ± 2.3	4.3 ± 3.2	Filtered		LAS
WS-05	Primary	06/01/89	-1.0 ± 2.7	6.2 ± 0.5	Unfiltered		BC
WS-05	Primary	07/22/89	3.5 ± 1.5	7.5 ± 0.4	Unfiltered, Decanted		BC
WS-05	Primary	09/09/89	4.0 ± 1.6	10.2 ± 0.4	Unfiltered		BC
WS-05	Primary	09/09/89	1.5 ± 1.4	9.3 ± 0.3	Filtered		BC
WS-06	Primary	06/01/89	7.4 ± 4.3	5.2 ± 0.8	Unfiltered		BC
WS-06	Primary	07/23/89	5.8 ± 1.7	7.6 ± 0.4	Unfiltered, Decanted		BC
WS-06	Primary	09/11/89	2.4 ± 2.4	12.3 ± 0.8	Unfiltered		BC
WS-06	Primary	09/11/89	2.9 ± 2.3	12.9 ± 0.8	Filtered		BC
WS-07	Primary	06/04/89	3.4 ± 4.0	7.3 ± 0.8	Unfiltered		BC
WS-07	Primary	07/23/89	8.3 ± 1.9	4.7 ± 0.5	Unfiltered, Decanted		BC
WS-07	Primary	12/06/90	3.80 ± 2.03	5.07 ± 2.59	Filtered		IT
WS-07	Duplicate	12/06/90	2.10 ± 1.69	5.23 ± 2.68	Filtered		IT
WS-07	Primary	03/08/91	5.76 ± 2.68	4.82 ± 2.55	Filtered		IT
WS-07	Primary	12/07/91	5.18 ± 2.97	5.78 ± 1.87	Filtered		IT
WS-07	Split	12/07/91	<2	<3	Filtered		CEP
WS-08	Primary	06/04/89	157.0 ± 22.6	239.0 ± 8.7	Unfiltered		BC
WS-08	Primary	07/22/89	3.9 ± 1.6	5.7 ± 0.4	Unfiltered, Decanted		BC
WS-08	Primary	07/22/89	2.1 ± 1.8	1.8 ± 0.6	Filtered		BC
WS-08	Primary	09/09/89	9.7 ± 1.9	10.7 ± 0.4	Unfiltered		BC
WS-08	Primary	09/09/89	2.6 ± 1.2	9.5 ± 0.3	Filtered		BC
WS-09	Primary	06/04/89	21.2 ± 3.7	11.5 ± 0.9	Unfiltered		BC
WS-09	Primary	07/19/89	8.8 ± 1.8	12.0 ± 0.5	Unfiltered, Decanted		BC
WS-09	Primary	07/19/89	5.4 ± 2.6	10.0 ± 1.0	Filtered		BC
WS-09A	Primary	06/01/89	-1.0 ± 3.4	4.3 ± 0.6	Unfiltered		BC
WS-09A	Primary	07/23/89	1.8 ± 1.2	3.9 ± 0.3	Unfiltered, Decanted		BC
WS-09A	Primary	09/12/89	3.9 ± 3.1	10.6 ± 1.0	Unfiltered		BC
WS-09A	Primary	09/12/89	-1.0 ± 2.3	7.9 ± 0.8	Filtered		BC
WS-09B	Primary	06/06/89	-1.0 ± 3.1	11.1 ± 0.7	Unfiltered		BC
WS-09B	Primary	07/24/89	5.8 ± 2.0	9.0 ± 0.4	Unfiltered, Decanted		BC
WS-12	Primary	06/04/89	11.2 ± 3.0	9.4 ± 0.6	Unfiltered		BC
WS-12	Primary	07/24/89	3.8 ± 1.5	6.8 ± 0.4	Unfiltered, Decanted		BC

See last page of Table E-1 for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
WS-13	Primary	06/03/89	10.5 ± 3.0	4.5 ± 0.7	Unfiltered		BC
WS-13	Primary	07/22/89	6.6 ± 1.8	6.1 ± 0.4	Unfiltered, Decanted		BC
WS-13	Primary	10/17/89	4.01 ± 2.45	3.82 ± 1.86	Filtered		UST
WS-13	Duplicate	10/17/89	2.98 ± 2.24	3.90 ± 1.90	Filtered		UST
WS-13	Primary	11/01/89	1.68 ± 1.92	5.77 ± 2.76	Unfiltered		UST
WS-13	Primary	11/01/89	1.69 ± 1.73	5.82 ± 2.75	Filtered		UST
WS-14	Primary	06/03/89	7.9 ± 4.0	2.3 ± 1.0	Unfiltered		BC
WS-14	Primary	07/22/89	3.3 ± 1.4	5.3 ± 0.3	Unfiltered, Decanted		BC
OS-01	Primary	06/05/89	-1.0 ± 3.0	5.6 ± 0.7	Unfiltered		BC
OS-01	Primary	07/24/89	5.1 ± 3.7	6.5 ± 1.2	Unfiltered, Decanted		BC
OS-01	Primary	09/13/89	3.6 ± 2.5	9.0 ± 0.9	Unfiltered		BC
OS-01	Primary	09/13/89	2.3 ± 2.3	5.5 ± 0.8	Filtered		BC
OS-01	Primary	06/28/90	2.28 ± 2.57	4.21 ± 2.51	Filtered		UST
OS-01	Primary	12/11/90	2.62 ± 1.83	5.31 ± 2.64	Filtered		IT
OS-01	Primary	03/09/91	3.19 ± 2.18	5.91 ± 2.60	Filtered		IT
OS-01	Primary	12/09/91	4.63 ± 3.03	5.79 ± 2.01	Filtered		IT
OS-01	Primary	06/09/92	-0.2 ± 1.8	2 ± 3	Filtered		CEP
OS-01	Primary	09/15/92	0.3 ± 2.0	3 ± 3	Filtered		CEP
OS-01	Primary	12/17/92	3 ± 2	4 ± 3	Filtered		CEP
OS-01	Primary	06/22/93	3 ± 2	17 ± 4	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
OS-01	Primary	08/23/93	4 ± 2	9 ± 3	Filtered		CEP
OS-01	Primary	11/08/93	3.0 ± 3.1	21.2 ± 4.3	Filtered		LAS
OS-01	Primary	02/23/94	2 ± 3.4	4.6 ± 2.7	Filtered		LAS
OS-01	Primary	08/15/94	-1.1 ± 2.4	3.6 ± 3.4	Filtered		LAS
OS-02	Primary	06/05/89	1.3 ± 2.6	-1.0 ± 0.7	Unfiltered		BC
OS-02	Primary	07/24/89	-1.0 ± 4.1	4.2 ± 1.4	Unfiltered, Decanted		BC
OS-02	Primary	09/13/89	2.9 ± 2.9	8.5 ± 0.8	Unfiltered		BC
OS-02	Primary	09/13/89	-1.0 ± 1.7	2.2 ± 0.5	Filtered		BC
OS-02	Primary	06/28/90	2.28 ± 2.85	1.40 ± 2.15	Filtered		UST
OS-02	Primary	12/11/90	0.188 ± 0.827	2.10 ± 2.26	Filtered		IT
OS-02	Primary	03/08/91	4.73 ± 3.42	4.05 ± 2.53	Filtered		IT
OS-02	Duplicate	03/08/91	2.83 ± 3.11	1.46 ± 2.53	Filtered		IT
OS-02	Primary	12/09/91	2.08 ± 2.22	1.88 ± 1.45	Filtered		IT
OS-02	Primary	06/09/92	-1 ± 2	2 ± 3	Filtered		CEP
OS-02	Primary	09/15/92	1.5 ± 2.0	1.8 ± 3.0	Filtered		CEP
OS-02	Primary	12/17/92	<2	<3	Filtered		CEP
OS-02	Primary	06/22/93	<2	7 ± 3	Filtered		CEP
OS-02	Primary	08/23/93	4 ± 2	4 ± 3	Filtered		CEP
OS-02	Primary	11/08/93	1.1 ± 2.2	1.5 ± 2.7	Filtered		LAS
OS-02	Primary	02/23/94	2.3 ± 2.4	1.3 ± 2.6	Filtered		LAS
OS-02	Primary	08/15/94	0.6 ± 2.4	1.3 ± 3.2	Filtered		LAS
OS-03	Primary	06/05/89	-1.0 ± 3.1	5.6 ± 0.7	Unfiltered		BC
OS-03	Primary	07/24/89	4.2 ± 3.7	7.5 ± 1.1	Unfiltered, Decanted		BC
OS-03	Primary	09/13/89	10.2 ± 3.4	17.1 ± 1.0	Unfiltered		BC

See last page of Table E-1 for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
OS-03	Primary	09/13/89	-1.0 ± 1.9	5.6 ± 0.7	Filtered		BC
OS-03	Primary	12/11/90	0.283 ± 0.909	3.76 ± 2.53	Filtered		IT
OS-03	Primary	03/08/91	1.79 ± 1.61	2.99 ± 2.34	Filtered		IT
OS-03	Primary	12/09/91	1.91 ± 1.90	3.04 ± 1.61	Filtered		IT
OS-03	Primary	06/09/92	-0.2 ± 1.8	3 ± 3	Filtered		CEP
OS-03	Primary	06/22/93	4 ± 3	13 ± 7	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
OS-03	Primary	08/23/93	<2	7 ± 3	Filtered		CEP
OS-03	Primary	11/08/93	-0.5 ± 1.4	2.6 ± 3.2	Filtered		LAS
OS-03	Primary	02/23/94	0.8 ± 2.4	3.9 ± 2.7	Filtered		LAS
OS-03	Primary	08/15/94	0.2 ± 2.5	3.8 ± 3.2	Filtered		LAS
OS-04	Primary	06/05/89	-1.0 ± 3.0	3.0 ± 0.7	Unfiltered		BC
OS-04	Primary	07/24/89	5.1 ± 2.0	12.0 ± 0.8	Unfiltered, Decanted		BC
OS-04	Primary	09/13/89	5.2 ± 3.3	14.1 ± 1.1	Unfiltered		BC
OS-04	Primary	09/13/89	-1.0 ± 2.3	8.8 ± 0.8	Filtered		BC
OS-04	Primary	12/11/90	0.731 ± 1.39	4.08 ± 2.42	Filtered		IT
OS-04	Primary	06/09/92	1 ± 2	6 ± 3	Filtered		CEP
OS-04	Primary	06/22/93	3 ± 2	10 ± 3	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
OS-04	Primary	08/23/93	<2	<3	Filtered		CEP
OS-04	Primary	02/23/94	1.3 ± 3.4	6.1 ± 3.2	Filtered		LAS
OS-04	Primary	08/15/94	1.5 ± 2.9	3.9 ± 3.6	Filtered		LAS
OS-05	Primary	06/05/89	7.4 ± 2.3	7.3 ± 0.6	Unfiltered		BC
OS-05	Primary	07/24/89	6.4 ± 2.1	9.2 ± 0.9	Unfiltered, Decanted		BC
OS-05	Primary	09/13/89	-1.0 ± 2.7	9.9 ± 1.0	Unfiltered		BC
OS-05	Primary	09/13/89	-1.0 ± 2.7	11.7 ± 1.0	Filtered		BC
OS-05	Primary	03/27/90	2.60 ± 3.33	4.30 ± 2.57	Filtered		UST
OS-05	Primary	06/28/90	2.80 ± 3.67	7.27 ± 2.84	Filtered		UST
OS-05	Primary	09/14/90	5.86 ± 4.59	9.76 ± 5.05	Filtered		UST
OS-05	Primary	12/11/90	0.515 ± 1.12	3.43 ± 2.45	Filtered		IT
OS-05	Primary	03/08/91	3.14 ± 2.75	4.17 ± 2.42	Filtered		IT
OS-05	Primary	12/09/91	2.39 ± 2.65	6.23 ± 2.31	Filtered		IT
OS-05	Primary	06/09/92	-0.2 ± 2	5 ± 3	Filtered		CEP
OS-05	Primary	09/15/92	1.9 ± 2.0	6 ± 4	Filtered		CEP
OS-05	Split	09/15/92	1.2 ± 6.3	12 ± 8	Filtered		BL
OS-05	Primary	12/17/92	3 ± 2	7 ± 4	Filtered		CEP
OS-05	Primary	06/22/93	4 ± 3	16 ± 7	Filtered	Gross alpha: high statistics due to large amounts of solids.	CEP
OS-05	Primary	08/23/93	<2	<3	Filtered		CEP
OS-05	Primary	11/08/93	1.3 ± 3.3	4.9 ± 3.8	Filtered		LAS
OS-05	Primary	02/23/94	5.2 ± 4.7	7.4 ± 3.6	Filtered		LAS
OS-08	Primary	06/05/89	-1.0 ± 3.0	3.8 ± 0.5	Unfiltered		BC
OS-08	Primary	07/24/89	1.2 ± 1.2	4.5 ± 0.5	Unfiltered, Decanted		BC
OS-08	Primary	09/13/89	1.5 ± 2.6	1.6 ± 0.8	Unfiltered		BC
OS-08	Primary	09/13/89	-1.0 ± 2.2	-1.0 ± 0.7	Filtered		BC
OS-08	Primary	06/09/92	0 ± 2	1 ± 3	Filtered		CEP
OS-08	Primary	06/22/93	<2	10 ± 3	Filtered		CEP

See last page of Table E-1 for footnotes and explanations.

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TABLE E-1

RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
OS-08	Primary	08/15/94	0.2 ± 3.3	2.1 ± 4.4	Filtered		LAS
OS-10	Primary	06/05/89	-1.0 ± 1.9	4.7 ± 0.5	Unfiltered		BC
OS-10	Primary	07/24/89	2.2 ± 1.4	4.2 ± 0.6	Unfiltered, Decanted		BC
OS-10	Primary	09/13/89	-1.0 ± 1.8	-1.0 ± 0.6	Unfiltered		BC
OS-10	Primary	09/13/89	-1.0 ± 1.6	-1.0 ± 0.6	Filtered		BC
OS-10	Primary	12/09/91	0.749 ± 1.57	0.444 ± 1.09	Filtered		IT
OS-12	Primary	06/04/89	74.9 ± 35.6	129.5 ± 8.1	Unfiltered		BC
OS-12	Primary	07/23/89	2.6 ± 0.9	12.4 ± 3.2	Unfiltered, Decanted		BC
OS-12	Primary	07/23/89	48 ± 27	67 ± 31	Unfiltered		FGL
OS-15	Primary	06/07/89	18.5 ± 4.7	4.7 ± 1.6	Unfiltered		BC
OS-15	Primary	07/23/89	11.6 ± 1.1	40.1 ± 1.1	Unfiltered, Decanted		BC
OS-15	Primary	12/10/91	3.39 ± 4.83	10.9 ± 4.69	Filtered		IT
OS-16	Primary	06/05/89	4.8 ± 2.3	4.7 ± 0.5	Unfiltered		BC
OS-16	Primary	07/22/89	10.8 ± 2.1	8.6 ± 0.5	Unfiltered, Decanted		BC
OS-16	Primary	09/14/89	5.3 ± 2.6	5.8 ± 1.1	Unfiltered		BC
OS-16	Primary	09/14/89	3.2 ± 2.5	5.2 ± 0.9	Filtered		BC
OS-16	Primary	10/19/89	5.54 ± 2.72	5.04 ± 1.99	Filtered		UST
OS-16	Duplicate	10/19/89	5.11 ± 2.59	4.27 ± 1.82	Filtered		UST
OS-16	Primary	11/01/89	2.57 ± 2.20	6.75 ± 2.92	Unfiltered		UST
OS-16	Duplicate	11/01/89	4.05 ± 2.65	4.29 ± 2.59	Unfiltered		UST
OS-16	Primary	11/01/89	4.39 ± 2.73	6.73 ± 2.59	Filtered		UST
OS-16	Duplicate	11/01/89	5.06 ± 2.95	6.99 ± 2.72	Filtered		UST
OS-16	Primary	12/10/91	1.65 ± 2.07	1.59 ± 1.75	Filtered		IT
OS-16	Primary	03/12/92	5 ± 3	5 ± 3	Filtered		CEP
OS-17	Primary	06/04/89	8.4 ± 2.8	13.9 ± 0.7	Unfiltered		BC
OS-17	Primary	07/22/89	4.5 ± 1.7	10.7 ± 0.5	Unfiltered, Decanted		BC
OS-17	Primary	09/13/89	2.5 ± 3.4	12.8 ± 1.4	Unfiltered		BC
OS-17	Primary	09/13/89	1.4 ± 3.5	7.6 ± 1.4	Filtered		BC
OS-17	Primary	12/10/91	1.64 ± 2.49	3.37 ± 2.26	Filtered		IT
OS-17	Primary	03/12/92	<2	6 ± 3	Filtered		CEP
OS-21	Primary	06/06/89	-1.0 ± 3.0	7.1 ± 0.7	Unfiltered		BC
OS-21	Primary	07/23/89	1.6 ± 1.5	5.5 ± 0.4	Unfiltered, Decanted		BC
OS-21	Primary	09/09/89	-1.0 ± 1.2	10.0 ± 0.4	Unfiltered		BC
OS-21	Primary	09/09/89	3.0 ± 1.5	10.0 ± 0.4	Filtered		BC
OS-21	Primary	10/19/89	1.08 ± 1.56	2.91 ± 1.78	Filtered		UST
OS-21	Primary	11/01/89	2.82 ± 2.18	6.83 ± 2.83	Unfiltered		UST
OS-21	Primary	11/01/89	1.42 ± 1.90	3.56 ± 2.52	Filtered		UST
OS-21	Primary	03/09/91	0.804 ± 1.70	4.13 ± 2.44	Filtered		IT
OS-21	Primary	12/10/91	1.55 ± 2.31	2.59 ± 1.92	Filtered		IT
OS-21	Primary	03/12/92	<2	<3	Filtered		CEP
OS-21	Primary	03/19/93	<2	<3	Filtered		CEP
OS-22	Primary	06/27/89	8.5 ± 3.4	11.0 ± 1.0	Unfiltered		BC
OS-23	Primary	06/28/89	14.6 ± 4.0	16.6 ± 1.1	Unfiltered		BC

See last page of Table E-1 for footnotes and explanations.

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TABLE E-1
RESULTS OF ANALYSES FOR GROSS ALPHA AND GROSS BETA RADIOACTIVITY IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identification	Sample Type	Date Sampled	Gross Alpha (pCi/l)	Gross Beta (pCi/l)	Sample Handling	Sample Comment	Laboratory
Calleguas	Primary	12/14/90	-0.00286 ± 0.418	5.50 ± 2.42	Filtered		IT
Calleguas	Primary	03/10/91	0.820 ± 1.07	3.05 ± 2.28	Filtered		IT
Calleguas	Primary	03/12/92	<2	5 ± 3	Filtered		CEP
Calleguas	Primary	09/22/92	0.7 ± 2.0	1.8 ± 2.3	Filtered		CEP

TABLE E-1
FOOTNOTES AND EXPLANATIONS

(—)	=	Not requested-not reported.
(<)	=	Less than; numerical value represents limit of detection for that analysis.
(U)	=	The result is less than the MDA (Minimum Detectable Activity).
Z	=	FLUTE sample port number.
pCi/l	=	picocuries per liter.
BC	=	BC Laboratories, Bakersfield, California.
BL	=	Barringer Laboratories, Inc., Golden, Colorado.
CEP	=	Controls for Environmental Pollution, Santa Fe, New Mexico.
DL	=	Davi Laboratories, Pinole, California.
ES	=	Eberline Services (formerly Thermo ReTec), Richmond, California.
FGL	=	FGL Environmental, Santa Paula, California.
IT	=	International Technologies, Inc. (formerly UST).
LAS	=	LAS Laboratories, Inc. (formerly Lockheed Martin), Las Vegas, Nevada.
STL	=	Severn Trent Laboratories, Richland, Washington.
TEL	=	Teledyne Isotopes, Westwood, New Jersey.
TMA	=	Thermoanalytical Inc.
TN	=	Thermo NUtech, Richmond, California.
TR	=	Thermo Retec (formerly Thermo NUtech), Richmond, California.
UST	=	United States Testing, Richland, Washington.
Primary	=	Primary sample
Duplicate	=	Sample duplicate
Split	=	Sample split

NOTE: All samples analyzed according to EPA method 900.0, Gross Alpha and Gross Beta Radioactivity.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

TABLE E-II

RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
SHALLOW WELLS						
SH-04	Primary	09/09/89	-75.8 ± 124	Unfiltered		UST
SH-04	Split	09/09/89	<1000	Unfiltered		TMA
SH-05	Primary	11/29/89	-202 ± 239	Unfiltered		UST
SH-06	Primary	11/29/89	-12.2 ± 249	Unfiltered		UST
SH-07	Primary	09/09/89	-80.5 ± 124	Unfiltered		UST
SH-07	Split	09/09/89	<1000	Unfiltered		TMA
SH-07	Primary	11/29/89	-258 ± 235	Unfiltered		UST
SH-11	Primary	09/09/89	-43.1 ± 126	Unfiltered		UST
SH-11	Split	09/09/89	<1000	Unfiltered		TMA
RS-07	Primary	09/11/89	-74.6 ± 120	Unfiltered		UST
RS-07	Split	09/11/89	<100	Unfiltered		TMA
RS-11	Primary	12/06/90	43.2 ± 200	Unfiltered		IT
RS-11	Primary	03/04/91	58.2 ± 192	Unfiltered		IT
RS-11	Primary	12/07/91	12.0 ± 212	Unfiltered		IT
RS-11	Primary	03/05/92	<500	Unfiltered		CEP
RS-11	Primary	03/07/93	378 ± 437	Unfiltered		CEP
RS-11	Primary	02/22/94	-80 ± 130	Unfiltered		LAS
RS-11	Primary	02/15/95	30 ± 190	Unfiltered		LAS
RS-11	Primary	02/07/96	-20 ± 160	Unfiltered		LAS
RS-11	Primary	02/04/97	117 ± 59	Unfiltered		LAS
RS-11	Primary	02/04/98	-50.7 ± 120	Unfiltered		TN
RS-11	Primary	02/06/99	80.1 ± 110	Unfiltered		TN
RS-11	Primary	02/15/00	45.4 ± 110	Unfiltered		TR
RS-11	Primary	02/06/01	-11.1 ± 98	Unfiltered		ES
RS-11	Primary	05/01/03	17.6 ± 100 (U)	Unfiltered		ES
RS-13	Primary	09/09/89	-148 ± 121	Unfiltered		UST
RS-13	Split	09/09/89	<1000	Unfiltered		TMA
RS-14	Primary	09/10/89	-116 ± 122	Unfiltered		UST
RS-14	Dup	09/10/89	-39.3 ± 129	Unfiltered		UST
RS-14	Split	09/10/89	<1000	Unfiltered		TMA
RS-14	Dup	09/10/89	<1000	Unfiltered		TMA
RS-16	Primary	03/09/92	<500	Unfiltered		CEP
RS-16	Primary	06/23/93	25 ± 442	Unfiltered		CEP
RS-16	Primary	02/09/95	-60 ± 190	Unfiltered		LAS
RS-16	Primary	02/04/97	353 ± 75	Unfiltered		LAS
RS-16	Primary	05/27/98	-41.3 ± 120	Unfiltered		TN
RS-17	Primary	12/10/90	61.0 ± 197	Unfiltered		IT
RS-17	Primary	12/07/91	-5.54 ± 211	Unfiltered		IT
RS-17	Primary	12/05/92	-297 ± 499	Unfiltered		CEP
RS-18	Primary	03/10/91	102 ± 195	Unfiltered		IT
RS-18	Dup	03/10/91	75.8 ± 194	Unfiltered		IT
RS-18	Primary	03/04/92	-200 ± 496	Unfiltered		CEP
RS-18	Primary	12/15/92	434 ± 495	Unfiltered		CEP
RS-18	Primary	06/23/93	-133 ± 500	Unfiltered		CEP
RS-18	Primary	11/06/93	230 ± 140	Unfiltered		LAS
RS-18	Primary	05/04/94	230 ± 160	Unfiltered		LAS
RS-18	Primary	02/17/95	40 ± 190	Unfiltered		LAS
RS-18	Primary	08/10/95	30 ± 210	Unfiltered		LAS

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RS-18	Primary	05/16/96	140 ± 190	Unfiltered		LAS
RS-18	Primary	02/03/97	255 ± 69	Unfiltered		LAS
RS-18	Primary	02/05/98	25.9 ± 120	Unfiltered		TN
RS-18	Primary	08/05/98	138 ± 130	Unfiltered		TN
RS-18	Primary	05/12/99	135 ± 110	Unfiltered		TN
RS-18	Primary	05/09/00	-1.10 ± 12	Unfiltered		TR
RS-18	Primary	02/19/01	124 ± 120	Unfiltered		ES
RS-18	Primary	05/02/03	68.7 ± 110(U)	Unfiltered		ES
RS-25	Primary	02/25/03	45.9 ± 110	Unfiltered		ES
RS-27	Primary	03/04/92	-472 ± 498	Unfiltered		CEP
RS-27	Primary	05/17/95	60 ± 190	Unfiltered		LAS
RS-27	Primary	05/07/98	-182 ± 120	Unfiltered		TN
RS-28	Primary	10/19/89	47.0 ± 195	Unfiltered		UST
RS-28	Primary	12/06/90	-25.0 ± 197	Unfiltered		IT
RS-28	Primary	03/09/91	198 ± 192	Unfiltered		IT
RS-28	Primary	12/06/91	86.9 ± 216	Unfiltered		IT
RS-28	Primary	03/06/92	<500	Unfiltered		IT
RS-28	Primary	03/09/92	<500	Unfiltered		CEP
RS-28	Primary	06/22/93	-393 ± 500	Unfiltered		CEP
RS-28	Primary	11/06/93	70 ± 120	Unfiltered		LAS
RS-28	Primary	05/07/94	30 ± 130	Unfiltered		LAS
RS-28	Primary	05/17/95	20 ± 180	Unfiltered		LAS
RS-28	Primary	11/08/95	120 ± 210	Unfiltered		LAS
RS-28	Primary	05/16/96	100 ± 180	Unfiltered		LAS
RS-28	Primary	05/08/98	-168 ± 120	Unfiltered		TN
RS-28	Primary	11/16/98	60.9 ± 130	Unfiltered		TN
RS-28	Primary	05/05/00	-12.3 ± 12	Unfiltered		TR
RS-28	Primary	05/10/01	6.37 ± 120	Unfiltered		ES
RS-54	Primary	09/11/93	1099 ± 707	Unfiltered		CEP
RS-54	Primary	09/29/93	-98 ± 500	Unfiltered		CEP
RS-54	Primary	05/07/94	80 ± 140	Unfiltered		LAS
RS-54	Primary	08/07/94	200 ± 170	Unfiltered		LAS
RS-54	Primary	08/03/95	50 ± 220	Unfiltered		LAS
RS-54	Primary	05/16/96	80 ± 180	Unfiltered		LAS
RS-54	Primary	08/23/96	160 ± 140	Unfiltered		LAS
RS-54	Primary	05/03/97	120 ± 120	Unfiltered		LAS
RS-54	Primary	08/02/97	40 ± 120	Unfiltered		LAS
RS-54	Primary	08/27/97	50 ± 110	Unfiltered		LAS
RS-54	Primary	02/08/98	134 ± 120	Unfiltered		TN
RS-54	Primary	05/28/98	69.4 ± 120	Unfiltered		TN
RS-54	Primary	08/04/98	36.8 ± 120	Unfiltered		TN
RS-54	Primary	02/02/99	85.4 ± 100	Unfiltered		TN
RS-54	Primary	08/18/99	66.4 ± 96	Unfiltered		TN
RS-54	Primary	03/15/00	144 ± 110	Unfiltered		TR
RS-54	Primary	11/01/01	64 ± 108	Unfiltered		DL
RS-54	Primary	03/01/02	332 ± 58	Unfiltered		DL
RS-54	Primary	11/07/02	1.83 ± 110	Unfiltered		ES
ES-06	Primary	05/04/94	-70 ± 110	Unfiltered		LAS
ES-08	Primary	05/26/94	-100 ± 100	Unfiltered		LAS

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
ES-24	Primary	09/10/89	-62.7 ± 124	Unfiltered		UST
ES-24	Dup	09/10/89	-58.0 ± 126	Unfiltered		UST
ES-24	Split	09/10/89	<1000	Unfiltered		TMA
ES-24	Dup	09/10/89	<1000	Unfiltered		TMA
ES-31	Primary	12/10/90	49.9 ± 196	Unfiltered		IT
ES-31	Primary	03/04/91	590 ± 221	Unfiltered		IT
ES-31	Dup	03/04/91	159 ± 197	Unfiltered		IT
ES-31	Primary	06/03/91	7.70 ± 194	Unfiltered		IT
ES-31	Primary	09/07/91	-48.1 ± 196	Unfiltered		IT
ES-31	Primary	12/07/91	-89.6 ± 206	Unfiltered		IT
ES-31	Primary	03/05/92	<500	Unfiltered		CEP
ES-31	Primary	03/03/93	300 ± 326	Unfiltered		CEP
ES-31	Primary	02/22/94	0 ± 150	Unfiltered		LAS
ES-31	Primary	02/15/95	-40 ± 180	Unfiltered		LAS
ES-31	Primary	02/06/96	-120 ± 140	Unfiltered		LAS
ES-31	Primary	02/04/97	155 ± 64	Unfiltered		LAS
ES-31	Primary	02/04/98	38.4 ± 120	Unfiltered		TN
ES-31	Primary	02/06/99	62.7 ± 100	Unfiltered		TN
ES-31	Primary	02/06/00	0 ± 120	Unfiltered		TR
ES-31	Primary	02/15/01	24.8 ± 120	Unfiltered		ES
ES-31	Primary	02/18/02	65 ± 121	Unfiltered		DL
ES-31	Primary	02/19/03	21.1 ± 110	Unfiltered		ES
HAR-03	Primary	09/11/89	-4.78 ± 121	Unfiltered		UST
HAR-03	Split	09/11/89	<1000	Unfiltered		TMA
HAR-04	Primary	09/11/89	-185 ± 115	Unfiltered		UST
HAR-04	Split	09/11/89	<1000	Unfiltered		TMA
HAR-04	Dup	09/11/89	<1000	Unfiltered		TMA
HAR-14	Primary	09/12/89	-22.9 ± 124	Unfiltered		UST
HAR-14	Split	09/12/89	<1000	Unfiltered		TMA
HAR-30	Primary	09/12/89	-45.0 ± 129	Unfiltered		UST
HAR-30	Split	09/12/89	<1000	Unfiltered		TMA
CHATSWORTH FORMATION WELLS						
RD-01	Primary	09/11/89	123 ± 137	Unfiltered		UST
RD-01	Split	09/11/89	<1000	Unfiltered		TMA
RD-03	Primary	09/10/89	-155 ± 122	Unfiltered		UST
RD-03	Split	09/10/89	<1000	Unfiltered		TMA
RD-03	Primary	09/11/89	<1000	Unfiltered		TMA
RD-03	Primary	09/12/89	-129 ± 117	Unfiltered		UST
RD-05B	Primary	09/10/89	-10.3 ± 128	Unfiltered		UST
RD-05B	Split	09/10/89	<1000	Unfiltered		TMA
RD-05B	Primary	09/10/91	144 ± 202	Unfiltered		IT
RD-06	Primary	09/10/89	-44.0 ± 126	Unfiltered		UST
RD-06	Split	09/10/89	<1000	Unfiltered		TMA
RD-06	Primary	03/06/91	83.1 ± 193	Unfiltered		IT
RD-06	Primary	09/10/91	58.6 ± 197	Unfiltered		IT
RD-06	Primary	03/10/92	<500	Unfiltered		CEP
RD-06	Primary	08/06/95	23.5 ± 5.9	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-07	Primary	09/11/89	-101 ± 128	Unfiltered		UST
RD-07	Split	09/11/89	<1000	Unfiltered		TMA
RD-07	Primary	12/05/90	-8.63 ± 201	Unfiltered		IT
RD-07	Primary	03/09/91	32.3 ± 192	Unfiltered		IT
RD-07	Primary	12/07/91	68.4 ± 215	Unfiltered		IT
RD-07	Primary	03/06/92	<500	Unfiltered		CEP
RD-07	Primary	03/07/93	342 ± 429	Unfiltered		CEP
RD-07	Primary	02/27/94	100 ± 160	Unfiltered		LAS
RD-07	Primary	08/09/94	-10 ± 140	Unfiltered		LAS
RD-07	Primary	02/09/95	90 ± 200	Unfiltered		LAS
RD-07	Dup	02/09/95	-30 ± 190	Unfiltered		LAS
RD-07	Primary	08/04/95	-10 ± 210	Unfiltered		LAS
RD-07	Primary	02/07/96	30 ± 160	Unfiltered		LAS
RD-07	Primary	08/18/96	-40 ± 110	Unfiltered		LAS
RD-07	Primary	02/25/97	60 ± 120	Unfiltered		LAS
RD-07	Primary	08/25/97	-9 ± 99	Unfiltered		LAS
RD-07	Primary	02/05/98	16.4 ± 120	Unfiltered		TN
RD-07	Primary	08/05/98	-48.2 ± 130	Unfiltered		TN
RD-07	Primary	02/06/99	59.3 ± 100	Unfiltered		TN
RD-07	Primary	08/19/99	-18.1 ± 96	Unfiltered		TN
RD-07	Primary	03/16/00	-21.1 ± 110	Unfiltered		TR
RD-07	Primary	08/10/00	-33.0 ± 130	Unfiltered		TR
RD-07	Primary	02/23/01	51.2 ± 130	Unfiltered		ES
RD-07	Primary	11/07/01	0.00 ± 77	Unfiltered		DL
RD-07	Primary	02/22/02	0.00 ± 200	Unfiltered		DL
RD-07	Primary	08/20/02	-10.6 ± 120	Unfiltered		ES
RD-07(Z3)	Primary	02/10/03	0.00 ± 110	Unfiltered		ES
RD-07(Z13)	Primary	08/28/03	-37.4 ± 110 (U)	Unfiltered		ES
RD-08	Primary	09/11/89	-136 ± 126	Unfiltered		UST
RD-08	Split	09/11/89	<1000	Unfiltered		TMA
RD-10	Primary	09/10/89	-72.1 ± 125	Unfiltered		UST
RD-10	Split	09/10/89	<1000	Unfiltered		TMA
RD-10	Primary	03/06/91	21.2 ± 190	Unfiltered		IT
RD-10	Primary	03/07/92	<500	Unfiltered		CEP
RD-13	Primary	09/10/89	<1000	Unfiltered		TMA
RD-13	Primary	09/12/89	-167 ± 115	Unfiltered		UST
RD-13	Primary	10/17/89	-88.1 ± 229	Unfiltered		UST
RD-13	Primary	12/06/90	-28.8 ± 197	Unfiltered		IT
RD-13	Primary	03/08/91	-33.32 ± 189	Unfiltered		IT
RD-13	Primary	12/10/91	-65.4 ± 214	Unfiltered		IT
RD-13	Primary	03/12/92	<500	Unfiltered		CEP
RD-13	Primary	03/08/93	63 ± 327	Unfiltered		CEP
RD-13	Primary	08/08/95	7.1 ± 6.6	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-13	Primary	08/26/97	-60 ± 92	Unfiltered		LAS
RD-14	Primary	10/18/89	-157 ± 226	Unfiltered		UST
RD-14	Dup	10/18/89	161 ± 202	Unfiltered		UST
RD-14	Primary	12/07/90	2.77 ± 195	Unfiltered		IT
RD-14	Primary	03/09/91	26.8 ± 191	Unfiltered		IT
RD-14	Primary	12/06/91	-90.6 ± 206	Unfiltered		IT
RD-14	Primary	03/05/92	<500	Unfiltered		CEP

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TABLE E-II

RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-14	Primary	03/07/93	475 ± 499	Unfiltered		CEP
RD-14	Primary	02/24/94	50 ± 150	Unfiltered		LAS
RD-14	Primary	02/08/95	-50 ± 190	Unfiltered		LAS
RD-14	Primary	02/16/96	-130 ± 170	Unfiltered		LAS
RD-15	Primary	02/07/97	40 ± 120	Unfiltered		LAS
RD-15	Primary	10/19/89	-12.2 ± 192	Unfiltered		UST
RD-15	Primary	12/07/90	49.9 ± 198	Unfiltered		IT
RD-15	Primary	03/10/91	85.5 ± 186	Unfiltered		IT
RD-15	Primary	12/06/91	-26.8 ± 210	Unfiltered		IT
RD-15	Primary	03/11/92	<500	Unfiltered		CEP
RD-15	Split	03/11/92	<100	Unfiltered		TEL
RD-15	Primary	05/10/01	75.2 ± 120	Unfiltered		ES
RD-15	Primary	03/06/02	0 ± 78	Unfiltered		DL
RD-15	Primary	02/26/03	68.7 ± 120	Unfiltered		ES
RD-16	Primary	10/25/89	176 ± 222	Unfiltered		UST
RD-16	Primary	12/07/90	56.3 ± 198	Unfiltered		IT
RD-16	Primary	03/09/91	98.1 ± 187	Unfiltered		IT
RD-16	Primary	12/05/91	67.4 ± 219	Unfiltered		IT
RD-16	Primary	06/06/92	564 ± 529	Unfiltered		CEP
RD-16	Primary	05/27/98	-160 ± 120	Unfiltered		TN
RD-17	Primary	10/18/89	77.8 ± 243	Unfiltered		UST
RD-17	Dup	10/18/89	14.1 ± 194	Unfiltered		UST
RD-17	Primary	12/04/90	108 ± 199	Unfiltered		IT
RD-17	Primary	03/05/91	1.85 ± 189	Unfiltered		IT
RD-17	Primary	12/07/91	-44.4 ± 209	Unfiltered		IT
RD-17	Split	12/07/91	<500	Unfiltered		CEP
RD-17	Primary	03/04/92	-98 ± 498	Unfiltered		CEP
RD-17	Primary	03/05/93	160 ± 300	Unfiltered		CEP
RD-17	Primary	02/26/94	-70 ± 130	Unfiltered		LAS
RD-17	Primary	02/08/95	-10 ± 200	Unfiltered		LAS
RD-17	Primary	02/04/96	-30 ± 150	Unfiltered		LAS
RD-17	Primary	02/08/97	10 ± 120	Unfiltered		LAS
RD-17	Primary	02/04/98	-80.3 ± 110	Unfiltered		TN
RD-17	Primary	02/08/99	-13.1 ± 120	Unfiltered		TN
RD-17	Primary	02/21/00	62.8 ± 120	Unfiltered		TR
RD-17	Primary	02/14/01	71.9 ± 120	Unfiltered		ES
RD-17	Primary	03/01/02	264 ± 58	Unfiltered		DL
RD-17	Primary	02/24/03	-52.5 ± 110	Unfiltered		ES
RD-18	Primary	10/26/89	53.6 ± 215	Unfiltered		UST
RD-18	Primary	12/08/90	26.8 ± 195	Unfiltered		IT
RD-18	Primary	03/09/91	201 ± 192	Unfiltered		IT
RD-18	Primary	12/11/91	-18.3 ± 217	Unfiltered		IT
RD-18	Primary	03/12/92	<500	Unfiltered		CEP
RD-18	Primary	02/22/94	40 ± 150	Unfiltered		LAS
RD-18	Primary	02/17/95	-90 ± 170	Unfiltered		LAS
RD-18	Primary	02/05/96	20 ± 160	Unfiltered		LAS
RD-18	Primary	02/06/97	100 ± 60	Unfiltered		LAS
RD-18	Primary	02/06/98	13.7 ± 110	Unfiltered		TN
RD-19	Primary	10/26/89	27.3 ± 214	Unfiltered		UST
RD-19	Primary	12/08/90	-20.3 ± 193	Unfiltered		IT
RD-19	Primary	03/08/91	11.5 ± 182	Unfiltered		IT

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TABLE E-II

RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-19	Dup	03/08/91	225 ± 193	Unfiltered		IT
RD-19	Primary	12/11/91	-22.1 ± 217	Unfiltered		IT
RD-19	Primary	03/12/92	<500	Unfiltered		CEP
RD-19	Primary	03/08/93	262 ± 499	Unfiltered		CEP
RD-19	Primary	02/26/94	-80 ± 130	Unfiltered		LAS
RD-19	Primary	02/15/95	-40 ± 180	Unfiltered		LAS
RD-19	Primary	02/06/96	-40 ± 150	Unfiltered		LAS
RD-19	Primary	02/07/97	-60 ± 100	Unfiltered		LAS
RD-19	Primary	02/06/98	49.9 ± 120	Unfiltered		TN
RD-20	Primary	10/17/89	-72.1 ± 230	Unfiltered		UST
RD-20	Primary	12/07/90	49.9 ± 197	Unfiltered		IT
RD-20	Primary	12/10/90	26.8 ± 192	Unfiltered		IT
RD-20	Primary	03/05/91	132 ± 196	Unfiltered		IT
RD-20	Primary	12/10/91	20.2 ± 219	Unfiltered		IT
RD-20	Primary	03/04/92	-274 ± 486	Unfiltered		CEP
RD-20	Primary	02/22/94	-120 ± 120	Unfiltered		LAS
RD-20	Primary	02/16/95	-40 ± 180	Unfiltered		LAS
RD-20	Dup	02/16/95	-50 ± 180	Unfiltered		LAS
RD-20	Primary	02/04/96	-110 ± 150	Unfiltered		LAS
RD-20	Primary	02/08/97	30 ± 120	Unfiltered		LAS
RD-20	Primary	02/04/98	-16.4 ± 120	Unfiltered		TN
RD-21	Primary	10/20/89	-100 ± 229	Unfiltered		UST
RD-21	Dup	10/20/89	35.7 ± 194	Unfiltered		UST
RD-21	Primary	12/03/90	182 ± 202	Unfiltered		IT
RD-21	Primary	03/08/91	119 ± 188	Unfiltered		IT
RD-21	Primary	12/05/91	184 ± 225	Unfiltered		IT
RD-21	Primary	03/04/92	-256 ± 497	Unfiltered		CEP
RD-21	Primary	03/06/93	314 ± 335	Unfiltered		CEP
RD-21	Primary	06/22/93	-570 ± 500	Unfiltered		CEP
RD-21	Primary	08/06/93	560 ± 510	Unfiltered		CEP
RD-21	Primary	11/06/93	0.000 ± 120	Unfiltered		LAS
RD-21	Primary	02/25/94	50 ± 150	Unfiltered		LAS
RD-21	Primary	08/08/94	-150 ± 110	Unfiltered		LAS
RD-21	Primary	02/08/95	40 ± 210	Unfiltered		LAS
RD-21	Primary	08/31/95	-60 ± 220	Unfiltered		LAS
RD-21	Primary	02/16/96	-110 ± 170	Unfiltered		LAS
RD-21	Primary	08/18/96	-40 ± 110	Unfiltered		LAS
RD-21	Primary	02/06/97	117 ± 61	Unfiltered		LAS
RD-21	Primary	02/09/98	13.7 ± 110	Unfiltered		TN
RD-21	Primary	02/16/99	0 ± 120	Unfiltered		TN
RD-21	Primary	03/15/00	25.0 ± 110	Unfiltered		TR
RD-21	Primary	10/24/01	0.00 ± 106	Unfiltered		DL
RD-21	Primary	03/06/02	0.00 ± 77	Unfiltered		DL
RD-21(Z2)	Primary	02/25/03	86.9 ± 120	Unfiltered		ES
RD-22	Primary	10/19/89	-47.9 ± 189	Unfiltered		UST
RD-22	Primary	12/04/90	41.3 ± 195	Unfiltered		IT
RD-22	Dup	12/04/90	116 ± 198	Unfiltered		IT
RD-22	Primary	03/11/91	-90.5 ± 186	Unfiltered		IT
RD-22	Primary	12/06/91	-26.8 ± 210	Unfiltered		IT
RD-22	Primary	06/05/92	75 ± 517	Unfiltered		CEP
RD-22	Primary	03/20/93	-627 ± 490	Unfiltered		CEP

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-22	Primary	06/22/93	118 ± 500	Unfiltered		CEP
RD-22	Primary	08/05/93	440 ± 500	Unfiltered		CEP
RD-22	Primary	11/21/93	-100 ± 110	Unfiltered		LAS
RD-22	Primary	02/24/94	70 ± 150	Unfiltered		LAS
RD-22	Primary	08/09/94	20 ± 140	Unfiltered		LAS
RD-22	Primary	02/17/95	-20 ± 180	Unfiltered		LAS
RD-22	Primary	08/29/95	100 ± 240	Unfiltered		LAS
RD-22	Primary	02/16/96	20 ± 190	Unfiltered		LAS
RD-22	Primary	08/18/96	-20 ± 110	Unfiltered		LAS
RD-22	Primary	02/26/97	140 ± 130	Unfiltered		LAS
RD-22	Primary	05/28/98	43.7 ± 110	Unfiltered		TN
RD-22	Primary	02/17/99	41.5 ± 120	Unfiltered		TN
RD-22	Primary	02/06/00	-139 ± 120	Unfiltered		TR
RD-22	Primary	02/16/01	-6.18 ± 120	Unfiltered		ES
RD-22	Primary	02/20/02	228 ± 80	Unfiltered		DL
RD-22(Z2)	Primary	02/24/03	16.5 ± 110	Unfiltered		ES
RD-23	Primary	10/20/89	589 ± 267	Unfiltered		UST
RD-23	Primary	06/29/90	129 ± 218	Unfiltered		UST
RD-23	Primary	12/05/90	88.3 ± 206	Unfiltered		IT
RD-23	Primary	03/11/91	106 ± 195	Unfiltered		IT
RD-23	Dup	03/11/91	64.7 ± 193	Unfiltered		IT
RD-23	Primary	12/05/91	256 ± 229	Unfiltered		IT
RD-23	Primary	03/04/92	-66 ± 517	Unfiltered		CEP
RD-23	Primary	03/21/93	455 ± 499	Unfiltered		CEP
RD-23	Primary	06/23/93	1574 ± 702	Unfiltered		CEP
RD-23	Reanalysis of Primary	06/23/93	672 ± 735	Unfiltered		CEP
RD-23	Primary	08/06/93	1108 ± 514	Unfiltered		CEP
RD-23	Reanalysis of Primary	08/06/93	406 ± 500	Unfiltered		CEP
RD-23	Primary	02/25/94	850 ± 250	Unfiltered		CEP
RD-23	Primary	08/08/94	500 ± 210	Unfiltered		LAS
RD-23	Primary	11/22/94	630 ± 250	Unfiltered		LAS
RD-23	Primary	02/05/95	340 ± 230	Unfiltered		LAS
RD-23	Primary	08/03/95	400 ± 250	Unfiltered		LAS
RD-23	Primary	02/16/96	430 ± 210	Unfiltered		LAS
RD-23	Primary	08/18/96	450 ± 180	Unfiltered		LAS
RD-23	Primary	02/27/97	350 ± 150	Unfiltered		LAS
RD-23	Primary	02/07/98	234 ± 120	Unfiltered		TN
RD-23	Primary	02/08/99	294 ± 130	Unfiltered		TN
RD-23	Primary	02/05/00	64.4 ± 120	Unfiltered		TR
RD-23	Primary	10/25/01	46 ± 108	Unfiltered		DL
RD-23	Primary	03/01/02	304 ± 59	Unfiltered		DL
RD-23(Z1)	Primary	02/26/03	116 ± 120	Unfiltered		ES
RD-24	Primary	09/12/89	-22 ± 122	Unfiltered		UST
RD-24	Dup	09/12/89	<1000	Unfiltered		TMA
RD-24	Primary	10/17/89	-89.0 ± 229	Unfiltered		UST
RD-24	Primary	12/05/90	37.4 ± 204	Unfiltered		IT
RD-24	Primary	03/06/91	158 ± 197	Unfiltered		IT
RD-24	Primary	12/11/91	-33.7 ± 216	Unfiltered		IT
RD-24	Primary	03/06/92	<500	Unfiltered		CEP
RD-24	Primary	02/23/94	230 ± 180	Unfiltered		LAS
RD-24	Primary	08/08/94	80 ± 150	Unfiltered		LAS

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-24	Primary	02/16/95	320 ± 220	Unfiltered		LAS
RD-24	Primary	08/10/95	170 ± 230	Unfiltered		LAS
RD-24	Primary	02/07/96	400 ± 190	Unfiltered		LAS
RD-24	Primary	08/07/96	320 ± 160	Unfiltered		LAS
RD-24	Primary	02/07/97	500 ± 180	Unfiltered		LAS
RD-24	Primary	08/04/97	390 ± 160	Unfiltered		LAS
RD-24	Primary	02/18/98	358 ± 130	Unfiltered		TN
RD-24	Primary	05/05/98	161 ± 130	Unfiltered		TN
RD-24	Primary	08/04/98	299 ± 140	Unfiltered		TN
RD-24	Primary	02/02/99	220 ± 120	Unfiltered		TN
RD-24	Primary	08/11/99	401 ± 110	Unfiltered		TN
RD-24	Primary	02/03/00	317 ± 130	Unfiltered		TR
RD-24	Primary	08/04/00	267 ± 140	Unfiltered		TR
RD-24	Primary	02/06/01	245 ± 110	Unfiltered		ES
RD-24	Primary	10/25/01	493 ± 113	Unfiltered		DL
RD-24	Primary	02/25/02	285 ± 58	Unfiltered		DL
RD-24	Primary	11/06/02	162 ± 110	Unfiltered		ES
RD-24	Primary	02/12/03	257 ± 120	Unfiltered		ES
RD-24	Primary	11/14/03	185 ± 120 (U)	Unfiltered		ES
RD-24	Split	11/14/03	237 ± 65	Unfiltered		STL
RD-25	Primary	09/12/89	-162 ± 116	Unfiltered		UST
RD-25	Dup	09/12/89	<1000	Unfiltered		TMA
RD-25	Split	09/12/89	<1000	Unfiltered		TMA
RD-25	Primary	10/20/89	-99.3 ± 229	Unfiltered		UST
RD-25	Primary	12/05/90	17.3 ± 202	Unfiltered		IT
RD-25	Primary	03/06/91	-45.3 ± 187	Unfiltered		IT
RD-25	Primary	12/10/91	93.3 ± 222	Unfiltered		IT
RD-25	Primary	03/06/92	<500	Unfiltered		CEP
RD-25	Primary	03/17/93	257 ± 427	Unfiltered		CEP
RD-25	Primary	02/28/94	-40 ± 130	Unfiltered		LAS
RD-25	Primary	08/17/94	-30 ± 130	Unfiltered		LAS
RD-25	Primary	02/09/95	-40 ± 190	Unfiltered		LAS
RD-25	Primary	08/18/95	-100 ± 200	Unfiltered		LAS
RD-25	Primary	02/06/96	-20 ± 150	Unfiltered		LAS
RD-25	Primary	08/20/96	50 ± 120	Unfiltered		LAS
RD-25	Primary	02/07/97	240 ± 150	Unfiltered		LAS
RD-25	Primary	08/21/97	-30 ± 110	Unfiltered		LAS
RD-25	Primary	02/05/98	-59.0 ± 110	Unfiltered		TN
RD-25	Primary	08/18/98	-66.5 ± 120	Unfiltered		TN
RD-25	Primary	02/16/99	81.0 ± 120	Unfiltered		TN
RD-25	Primary	08/19/99	-20.3 ± 98	Unfiltered		TN
RD-25	Primary	02/16/00	23.4 ± 110	Unfiltered		TR
RD-25	Primary	08/09/00	3.69 ± 130	Unfiltered		TR
RD-25	Primary	02/07/01	-48.4 ± 98	Unfiltered		ES
RD-25	Primary	10/25/01	0.00 ± 78	Unfiltered		DL
RD-25	Primary	03/07/02	0.00 ± 78	Unfiltered		DL
RD-25	Primary	11/06/02	-95.2 ± 100	Unfiltered		ES
RD-25	Primary	02/24/03	-31.8 ± 110	Unfiltered		ES
RD-25	Primary	11/13/03	9.52 ± 120 (U)	Unfiltered		ES
RD-26	Primary	10/20/89	45.9 ± 237	Unfiltered		UST
RD-26	Primary	12/04/90	209 ± 204	Unfiltered		IT

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-26	Primary	03/07/91	110 ± 187	Unfiltered		IT
RD-26	Primary	03/11/92	<500	Unfiltered		CEP
RD-27	Primary	10/19/89	2.82 ± 193	Unfiltered		UST
RD-27	Primary	12/04/90	90.2 ± 197	Unfiltered		IT
RD-27	Primary	03/07/91	27.9 ± 183	Unfiltered		IT
RD-27	Primary	12/06/91	-48.1 ± 209	Unfiltered		IT
RD-27	Primary	03/09/92	<500	Unfiltered		CEP
RD-27	Primary	03/08/93	293 ± 322	Unfiltered		CEP
RD-27	Primary	08/09/93	324 ± 500	Unfiltered		CEP
RD-27	Primary	02/28/94	0 ± 140	Unfiltered		LAS
RD-27	Primary	08/18/94	-110 ± 120	Unfiltered		LAS
RD-27	Primary	02/17/95	-60 ± 180	Unfiltered		LAS
RD-27	Primary	08/18/95	80 ± 220	Unfiltered		LAS
RD-27	Primary	02/05/96	-30 ± 150	Unfiltered		LAS
RD-27	Primary	08/19/96	240 ± 150	Unfiltered		LAS
RD-27	Primary	02/05/97	87 ± 58	Unfiltered		LAS
RD-27	Primary	08/27/97	-16 ± 98	Unfiltered		LAS
RD-27	Primary	02/04/98	11.4 ± 120	Unfiltered		TN
RD-27	Primary	08/07/98	-83.9 ± 130	Unfiltered		TN
RD-27	Primary	02/16/99	3.33 ± 120	Unfiltered		TN
RD-27	Primary	08/17/99	-48.0 ± 94	Unfiltered		TN
RD-27	Primary	02/21/00	31.2 ± 110	Unfiltered		TR
RD-27	Primary	08/04/00	73.6 ± 130	Unfiltered		TR
RD-27	Primary	02/14/01	8.32 ± 120	Unfiltered		ES
RD-27	Primary	10/26/01	30 ± 107	Unfiltered		DL
RD-27	Primary	03/06/02	0 ± 77	Unfiltered		DL
RD-27	Primary	08/22/02	-24.9 ± 120	Unfiltered		ES
RD-27	Primary	02/21/03	29.8 ± 110	Unfiltered		ES
RD-27	Primary	11/14/03	-11.2 ± 110 (U)	Unfiltered		ES
RD-27	Split	11/14/03	9.54 ± 48.9 (U)	Unfiltered		STL
RD-28	Primary	09/13/89	665 ± 149	Unfiltered		UST
RD-28	Split	09/13/89	<1000	Unfiltered		TMA
RD-28	Primary	10/19/89	699 ± 234	Unfiltered		UST
RD-28	Primary	03/27/90	819 ± 236	Unfiltered		UST
RD-28	Primary	07/01/90	612 ± 244	Unfiltered		UST
RD-28	Primary	09/16/90	814 ± 242	Unfiltered		UST
RD-28	Dup	09/16/90	839 ± 242	Unfiltered		UST
RD-28	Primary	12/05/90	567 ± 232	Unfiltered		IT
RD-28	Primary	03/06/91	638 ± 223	Unfiltered		IT
RD-28	Primary	06/10/91	431 ± 227	Unfiltered		IT
RD-28	Primary	09/11/91	620 ± 247	Unfiltered		IT
RD-28	Primary	12/10/91	575 ± 250	Unfiltered		IT
RD-28	Split	12/10/91	<500	Unfiltered		CEP
RD-28	Primary	03/06/92	420 ± 110	Unfiltered		TEL
RD-28	Split	03/06/92	<500	Unfiltered		CEP
RD-28	Primary	06/10/92	1025 ± 505	Unfiltered		CEP
RD-28	Split	06/10/92	540 ± 120	Unfiltered		TEL
RD-28	Primary	09/16/92	300 ± 500	Unfiltered		CEP
RD-28	Dup	09/16/92	450 ± 290	Unfiltered		BL
RD-28	Primary	12/07/92	465 ± 500	Unfiltered		CEP
RD-28	Primary	03/17/93	0 ± 490	Unfiltered		CEP

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RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-28	Primary	08/05/93	1684 ± 522	Unfiltered		CEP
RD-28	Reanalysis of Primary	08/05/93	369 ± 500	Unfiltered		CEP
RD-28	Primary	02/24/94	490 ± 210	Unfiltered		LAS
RD-28	Primary	08/17/94	870 ± 240	Unfiltered		LAS
RD-28	Primary	02/09/95	380 ± 230	Unfiltered		LAS
RD-28	Primary	08/18/95	680 ± 280	Unfiltered		LAS
RD-28	Primary	02/06/96	430 ± 190	Unfiltered		LAS
RD-28	Primary	08/20/96	450 ± 170	Unfiltered		LAS
RD-28	Primary	02/06/97	496 ± 83	Unfiltered		LAS
RD-28	Primary	08/28/97	320 ± 140	Unfiltered		LAS
RD-28	Primary	02/05/98	267 ± 130	Unfiltered		TN
RD-28	Primary	08/18/98	50.6 ± 130	Unfiltered		TN
RD-28	Primary	02/16/99	55.3 ± 120	Unfiltered		TN
RD-28	Primary	11/03/99	-50 ± 98	Unfiltered		TN
RD-28	Primary	02/16/00	744 ± 140	Unfiltered		TR
RD-28	Primary	08/09/00	916 ± 150	Unfiltered		TR
RD-28	Primary	02/07/01	1100 ± 130	Unfiltered		ES
RD-28	Primary	10/25/01	0.00 ± 100	Unfiltered		DL
RD-28	Primary	02/25/02	484 ± 36	Unfiltered		DL
RD-28	Primary	11/06/02	1280 ± 140	Unfiltered		ES
RD-28	Primary	02/24/03	756 ± 130	Unfiltered		ES
RD-28	Primary	11/14/03	1430 ± 210	Unfiltered		ES
RD-29	Primary	10/18/89	-101 ± 230	Unfiltered		UST
RD-29	Primary	12/06/90	55.7 ± 201	Unfiltered		IT
RD-29	Primary	03/05/91	105 ± 194	Unfiltered		IT
RD-29	Primary	12/10/91	89.5 ± 222	Unfiltered		IT
RD-29	Split	12/10/91	<500	Unfiltered		CEP
RD-29	Primary	03/03/92	-447 ± 520	Unfiltered		CEP
RD-29	Primary	03/05/93	366 ± 499	Unfiltered		CEP
RD-29	Primary	08/08/93	345 ± 500	Unfiltered		CEP
RD-29	Primary	02/26/94	70 ± 150	Unfiltered		LAS
RD-29	Primary	08/17/94	10 ± 260	Unfiltered		LAS
RD-29	Primary	05/09/01	19.0 ± 120	Unfiltered		ES
RD-29	Primary	05/03/02	56 ± 118	Unfiltered		DL
RD-29	Primary	05/13/03	-12.4 ± 100 (U)	Unfiltered		ES
RD-30	Primary	10/19/89	108 ± 199	Unfiltered		UST
RD-30	Primary	12/06/90	34.6 ± 200	Unfiltered		IT
RD-30	Primary	03/09/91	89.6 ± 195	Unfiltered		IT
RD-30	Primary	09/09/91	20.3 ± 199	Unfiltered		IT
RD-30	Primary	12/06/91	28.7 ± 213	Unfiltered		IT
RD-30	Primary	06/03/92	-76 ± 518	Unfiltered		CEP
RD-30	Split	06/03/92	<200	Unfiltered		TEL
RD-30	Primary	03/21/93	-686 ± 499	Unfiltered		CEP
RD-30	Primary	02/26/94	70 ± 150	Unfiltered		LAS
RD-30	Primary	08/09/94	-30 ± 130	Unfiltered		LAS
RD-30	Primary	02/08/95	10 ± 200	Unfiltered		LAS
RD-30	Primary	08/19/95	30 ± 220	Unfiltered		LAS
RD-30	Primary	02/28/96	-40 ± 180	Unfiltered		LAS
RD-30	Primary	08/20/96	40 ± 120	Unfiltered		LAS
RD-30	Primary	02/25/97	40 ± 110	Unfiltered		LAS
RD-30	Primary	08/27/97	50 ± 110	Unfiltered		LAS

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RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-30	Primary	05/28/98	78.6 ± 110	Unfiltered		TN
RD-30	Primary	08/05/98	-85.0 ± 130	Unfiltered		TN
RD-30	Primary	02/05/99	38.5 ± 99	Unfiltered		TN
RD-30	Primary	05/05/00	-0.880 ± 12	Unfiltered		TR
RD-30	Primary	08/08/00	19.7 ± 130	Unfiltered		TR
RD-30	Primary	05/09/01	72.5 ± 120	Unfiltered		ES
RD-30	Primary	11/09/01	136 ± 104	Unfiltered		DL
RD-30	Primary	03/11/02	264 ± 82	Unfiltered		DL
RD-30	Primary	08/30/02	52.6 ± 120	Unfiltered		ES
RD-30	Primary	02/07/03	83.8 ± 110	Unfiltered		ES
RD-30	Primary	11/14/03	-76.9 ± 110 (U)	Unfiltered		ES
RD-31	Primary	10/24/89	188 ± 227	Unfiltered		UST
RD-31	Primary	12/05/90	-56.6 ± 198	Unfiltered		IT
RD-31	Primary	03/10/91	182 ± 191	Unfiltered		IT
RD-31	Primary	03/05/92	<500	Unfiltered		CEP
RD-33A	Primary	12/05/91	97.2 ± 221	Unfiltered		IT
RD-33A	Primary	12/12/91	-14.4 ± 214	Unfiltered		IT
RD-33A	Split	12/12/91	<500	Unfiltered		CEP
RD-33A	Primary	06/08/92	335 ± 515	Unfiltered		CEP
RD-33A	Primary	09/15/92	299 ± 500	Unfiltered		CEP
RD-33A	Primary	12/05/92	-43 ± 500	Unfiltered		CEP
RD-33A	Primary	06/24/93	-468 ± 437	Unfiltered		CEP
RD-33A	Primary	08/24/93	436 ± 500	Unfiltered		CEP
RD-33A	Primary	11/17/93	-70 ± 120	Unfiltered		LAS
RD-33A	Primary	02/27/94	-120 ± 120	Unfiltered		LAS
RD-33A	Primary	05/10/94	60 ± 130	Unfiltered		LAS
RD-33A	Primary	08/18/94	-20 ± 130	Unfiltered		LAS
RD-33A	Primary	02/07/95	-50 ± 200	Unfiltered		LAS
RD-33A	Primary	02/07/95	4.6 ± 5.5	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-33A	Primary	08/09/95	90 ± 220	Unfiltered		LAS
RD-33A	Primary	02/19/96	10 ± 180	Unfiltered		LAS
RD-33A	Primary	08/23/96	120 ± 140	Unfiltered		LAS
RD-33A	Primary	02/25/97	120 ± 130	Unfiltered		LAS
RD-33A	Primary	08/27/97	-78 ± 86	Unfiltered		LAS
RD-33A	Primary	05/27/98	-125 ± 120	Unfiltered		TN
RD-33A	Primary	08/17/98	0 ± 130	Unfiltered		TN
RD-33A	Primary	02/03/99	-2.34 ± 100	Unfiltered		TN
RD-33A	Primary	02/09/00	-59.1 ± 120	Unfiltered		TR
RD-33A	Primary	05/14/01	-57.4 ± 120	Unfiltered		ES
RD-33A	Primary	02/15/02	257 ± 122	Unfiltered		DL
RD-33A(Z4)	Primary	01/30/03	8.31 ± 120	Unfiltered		ES
RD-33B	Primary	12/12/91	51.9 ± 218	Unfiltered		IT
RD-33B	Split	12/12/91	<500	Unfiltered		CEP
RD-33B	Primary	06/24/92	-219 ± 492	Unfiltered		CEP
RD-33B	Primary	09/15/92	500 ± 500	Unfiltered		CEP
RD-33B	Primary	12/05/92	4 ± 500	Unfiltered		CEP
RD-33B	Primary	06/24/93	-346 ± 500	Unfiltered		CEP
RD-33B	Primary	08/24/93	0 ± 500	Unfiltered		CEP
RD-33B	Primary	11/17/93	-60 ± 120	Unfiltered		LAS
RD-33B	Primary	02/27/94	60 ± 150	Unfiltered		LAS

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-33B	Primary	05/10/94	-20 ± 120	Unfiltered		LAS
RD-33B	Primary	08/18/94	-130 ± 120	Unfiltered		LAS
RD-33B	Primary	02/07/95	20 ± 200	Unfiltered		LAS
RD-33B	Primary	08/09/95	-80 ± 200	Unfiltered		LAS
RD-33B	Primary	02/19/96	-40 ± 180	Unfiltered		LAS
RD-33B	Primary	08/23/96	-20 ± 110	Unfiltered		LAS
RD-33B	Primary	02/25/97	30 ± 110	Unfiltered		LAS
RD-33B	Primary	08/22/97	-60 ± 110	Unfiltered		LAS
RD-33B	Primary	05/27/98	-173 ± 120	Unfiltered		TN
RD-33B	Primary	08/17/98	-22.9 ± 120	Unfiltered		TN
RD-33B	Primary	02/03/99	-6.96 ± 100	Unfiltered		TH
RD-33B	Primary	08/11/99	-1.67 ± 88	Unfiltered		TN
RD-33B	Primary	05/17/00	-38.6 ± 100	Unfiltered		TR
RD-33B	Primary	08/09/00	64.1 ± 130	Unfiltered		TR
RD-33B	Primary	02/17/01	-67.1 ± 120	Unfiltered		ES
RD-33B	Primary	10/30/01	0.00 ± 80	Unfiltered		DL
RD-33B	Primary	02/15/02	0.00 ± 118	Unfiltered		DL
RD-33B	Primary	08/21/02	-56.4 ± 120	Unfiltered		ES
RD-33B	Primary	02/11/03	87.7 ± 120	Unfiltered		ES
RD-33B	Primary	11/13/03	52.0 ± 120 (U)	Unfiltered		ES
RD-33C	Primary	12/05/91	68.3 ± 219	Unfiltered		IT
RD-33C	Primary	12/12/91	-21.1 ± 214	Unfiltered		IT
RD-33C	Split	12/12/91	<500	Unfiltered		CEP
RD-33C	Primary	06/08/92	368 ± 518	Unfiltered		CEP
RD-33C	Primary	09/15/92	241 ± 500	Unfiltered		CEP
RD-33C	Primary	12/05/92	-215 ± 500	Unfiltered		CEP
RD-33C	Primary	06/24/93	-280 ± 500	Unfiltered		CEP
RD-33C	Primary	08/24/93	159 ± 500	Unfiltered		CEP
RD-33C	Primary	11/17/93	30 ± 130	Unfiltered		LAS
RD-33C	Primary	02/27/94	0 ± 140	Unfiltered		LAS
RD-33C	Primary	05/09/94	-20 ± 120	Unfiltered		LAS
RD-33C	Primary	08/17/94	-40 ± 130	Unfiltered		LAS
RD-33C	Primary	02/07/95	-10 ± 200	Unfiltered		LAS
RD-33C	Primary	08/09/95	0 ± 210	Unfiltered		LAS
RD-33C	Primary	02/19/96	40 ± 190	Unfiltered		LAS
RD-33C	Primary	08/22/96	30 ± 120	Unfiltered		LAS
RD-33C	Primary	02/25/97	40 ± 120	Unfiltered		LAS
RD-33C	Primary	08/21/97	-20 ± 120	Unfiltered		LAS
RD-33C	Primary	05/27/98	-149 ± 120	Unfiltered		TN
RD-33C	Primary	08/17/98	37.4 ± 130	Unfiltered		TN
RD-33C	Primary	02/03/99	-2.30 ± 99	Unfiltered		TN
RD-33C	Primary	08/11/99	1.70 ± 90	Unfiltered		TN
RD-33C	Primary	02/09/00	-90.6 ± 110	Unfiltered		TR
RD-33C	Primary	08/09/00	77.5 ± 130	Unfiltered		TR
RD-33C	Primary	02/17/01	-50.0 ± 120	Unfiltered		ES
RD-33C	Primary	10/30/01	0.00 ± 78	Unfiltered		DL
RD-33C	Primary	02/15/02	175 ± 121	Unfiltered		DL
RD-33C	Primary	08/20/02	55.8 ± 120	Unfiltered		ES
RD-33C	Primary	02/10/03	73.1 ± 120	Unfiltered		ES
RD-33C	Primary	11/13/03	107 ± 110 (U)	Unfiltered		ES
RD-33C	Split	11/13/03	-23.3 ± 46.7 (U)	Unfiltered		STL

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-34A	Primary	12/05/91	7040 ± 685	Unfiltered		IT
RD-34A	Split	12/05/91	7155 ± 632	Unfiltered		CEP
RD-34A	Primary	03/10/92	7069 ± 598	Unfiltered		CEP
RD-34A	Split	03/10/92	6700 ± 200	Unfiltered		TEL
RD-34A	Primary	06/08/92	2529 ± 548	Unfiltered		CEP
RD-34A	Primary	09/13/92	1841 ± 527	Unfiltered		CEP
RD-34A	Split	09/13/92	1800 ± 300	Unfiltered		BL
RD-34A	Primary	12/05/92	3006 ± 545	Unfiltered		CEP
RD-34A	Reanalysis of Primary	12/05/92	4180 ± 768	Unfiltered		CEP
RD-34A	Split	12/05/92	3500 ± 400	Unfiltered		BL
RD-34A	Primary	03/09/93	1119 ± 743	Unfiltered		CEP
RD-34A	Primary	06/22/93	657 ± 500	Unfiltered		CEP
RD-34A	Primary	08/24/93	812 ± 639	Unfiltered		CEP
RD-34A	Primary	11/18/93	990 ± 230	Unfiltered		LAS
RD-34A	Primary	02/26/94	3550 ± 440	Unfiltered		LAS
RD-34A	Primary	05/09/94	3430 ± 390	Unfiltered		LAS
RD-34A	Primary	08/09/94	2710 ± 380	Unfiltered		LAS
RD-34A	Primary	11/09/94	1860 ± 340	Unfiltered		LAS
RD-34A	Primary	02/07/95	3200 ± 440	Unfiltered		LAS
RD-34A	Primary	08/09/95	2080 ± 380	Unfiltered		LAS
RD-34A	Primary	02/19/96	4020 ± 420	Unfiltered		LAS
RD-34A	Primary	08/18/96	4250 ± 470	Unfiltered		LAS
RD-34A	Primary	02/07/97	4870 ± 500	Unfiltered		LAS
RD-34A	Primary	05/27/98	2210 ± 180	Unfiltered		TN
RD-34A	Primary	08/18/98	2060 ± 180	Unfiltered		TN
RD-34A	Primary	08/29/00	2440 ± 150	Unfiltered		TR
RD-34A	Primary	05/09/01	3120 ± 200	Unfiltered		ES
RD-34A	Primary	05/16/03	2420 ± 300	Unfiltered		ES
RD-34B	Primary	12/05/91	336 ± 234	Unfiltered		IT
RD-34B	Primary	12/11/91	820 ± 538	Unfiltered		CEP
RD-34B	Split	12/11/91	236 ± 230	Unfiltered		IT
RD-34B	Primary	03/10/92	<500	Unfiltered		CEP
RD-34B	Split	03/10/92	390 ± 100	Unfiltered		TEL
RD-34B	Primary	06/08/92	534 ± 520	Unfiltered		CEP
RD-34B	Primary	09/13/92	400 ± 500	Unfiltered		CEP
RD-34B	Split	09/13/92	420 ± 290	Unfiltered		BL
RD-34B	Primary	12/05/92	121 ± 500	Unfiltered		CEP
RD-34B	Primary	03/21/93	125 ± 490	Unfiltered		CEP
RD-34B	Primary	06/23/93	-387 ± 500	Unfiltered		CEP
RD-34B	Primary	08/24/93	286 ± 500	Unfiltered		CEP
RD-34B	Primary	11/18/93	210 ± 150	Unfiltered		LAS
RD-34B	Primary	02/26/94	60 ± 150	Unfiltered		LAS
RD-34B	Primary	05/10/94	220 ± 150	Unfiltered		LAS
RD-34B	Primary	08/09/94	0 ± 140	Unfiltered		LAS
RD-34B	Primary	11/09/94	170 ± 190	Unfiltered		LAS
RD-34B	Primary	02/07/95	220 ± 220	Unfiltered		LAS
RD-34B	Primary	02/07/95	205 ± 12	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-34B	Primary	08/09/95	90 ± 220	Unfiltered		LAS
RD-34B	Primary	02/19/96	448 ± 21	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-34B	Primary	02/19/96	440 ± 55	Unfiltered		LAS
RD-34B	Primary	08/18/96	330 ± 160	Unfiltered		LAS
RD-34B	Primary	02/07/97	150 ± 130	Unfiltered		LAS
RD-34B	Primary	08/21/97	200 ± 140	Unfiltered		LAS
RD-34B	Primary	05/27/98	372 ± 130	Unfiltered		TN
RD-34B	Primary	08/18/98	376 ± 140	Unfiltered		TN
RD-34B	Primary	02/04/99	650 ± 120	Unfiltered		TN
RD-34B	Primary	08/11/99	176 ± 100	Unfiltered		TN
RD-34B	Primary	02/05/00	200 ± 120	Unfiltered		TR
RD-34B	Primary	02/16/01	180 ± 130	Unfiltered		ES
RD-34B	Primary	11/02/01	89 ± 103	Unfiltered		DL
RD-34B	Primary	02/15/02	151 ± 121	Unfiltered		DL
RD-34B	Primary	08/23/02	-40.8 ± 120	Unfiltered		ES
RD-34B	Primary	02/06/03	171 ± 110	Unfiltered		ES
RD-34B	Primary	11/13/03	254 ± 120	Unfiltered		ES
RD-34C	Primary	12/06/91	71.2 ± 215	Unfiltered		IT
RD-34C	Primary	12/12/91	30.8 ± 217	Unfiltered		IT
RD-34C	Split	12/12/91	<500	Unfiltered		CEP
RD-34C	Primary	03/10/92	<500	Unfiltered		CEP
RD-34C	Split	03/10/92	<100	Unfiltered		TEL
RD-34C	Primary	06/08/92	455 ± 519	Unfiltered		CEP
RD-34C	Primary	09/13/92	357 ± 500	Unfiltered		CEP
RD-34C	Split	09/13/92	-140 ± 270	Unfiltered		BL
RD-34C	Primary	12/05/92	-373 ± 494	Unfiltered		CEP
RD-34C	Primary	03/09/93	300 ± 499	Unfiltered		CEP
RD-34C	Primary	06/24/93	158 ± 500	Unfiltered		CEP
RD-34C	Primary	08/24/93	101 ± 500	Unfiltered		CEP
RD-34C	Primary	11/06/93	140 ± 140	Unfiltered		LAS
RD-34C	Primary	02/26/94	-30 ± 140	Unfiltered		LAS
RD-34C	Primary	05/09/94	-20 ± 120	Unfiltered		LAS
RD-34C	Primary	08/09/94	-80 ± 130	Unfiltered		LAS
RD-34C	Primary	11/09/94	40 ± 170	Unfiltered		LAS
RD-34C	Primary	02/07/95	-10 ± 200	Unfiltered		LAS
RD-34C	Primary	08/10/95	-240 ± 180	Unfiltered		LAS
RD-34C	Primary	02/19/96	-290 ± 160	Unfiltered		LAS
RD-34C	Primary	08/19/96	30 ± 110	Unfiltered		LAS
RD-34C	Primary	02/07/97	40 ± 120	Unfiltered		LAS
RD-34C	Primary	08/21/97	-30 ± 110	Unfiltered		LAS
RD-34C	Primary	05/27/98	-184 ± 120	Unfiltered		TN
RD-34C	Primary	08/17/98	127 ± 120	Unfiltered		TN
RD-34C	Primary	02/04/99	11.4 ± 99	Unfiltered		TN
RD-34C	Primary	08/12/99	45.0 ± 93	Unfiltered		TN
RD-34C	Primary	02/05/00	-75.5 ± 120	Unfiltered		TR
RD-34C	Primary	08/08/00	16.0 ± 130	Unfiltered		TR
RD-34C	Primary	02/16/01	-111 ± 120	Unfiltered		ES
RD-34C	Primary	11/02/01	20 ± 102	Unfiltered		DL
RD-34C	Primary	02/14/02	0 ± 115	Unfiltered		DL
RD-34C	Primary	08/28/02	-74.5 ± 120	Unfiltered		ES
RD-34C	Primary	02/06/03	-78.4 ± 110	Unfiltered		ES
RD-34C	Primary	11/13/03	-33.1 ± 110 (U)	Unfiltered		ES
RD-35B	Primary	05/07/99	17.4 ± 100	Unfiltered		TN

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TABLE E-II

RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-38B	Primary	02/17/99	20.1 ± 120	Unfiltered		TN
RD-45A	Primary	05/05/94	30 ± 130	Unfiltered		LAS
RD-45C	Primary	10/06/94	-70 ± 120	Unfiltered		LAS
RD-46B	Primary	02/15/99	125 ± 120	Unfiltered		TN
RD-47	Primary	08/07/95	1.4 ± 5.2	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-48A	Primary	08/06/95	11.6 ± 6.6	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-48B	Primary	08/07/95	3.0 ± 5.6	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-48C	Primary	08/06/95	14.9 ± 6.4	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-50	Primary	05/05/94	60 ± 130	Unfiltered		LAS
RD-50	Primary	05/19/95	-30 ± 180	Unfiltered		LAS
RD-50	Primary	05/14/96	-30 ± 170	Unfiltered		LAS
RD-50	Primary	05/05/97	550 ± 170	Unfiltered		LAS
RD-50	Primary	05/28/98	-18.6 ± 110	Unfiltered		TN
RD-51C	Primary	12/14/91	32.7 ± 219	Unfiltered		IT
RD-51C	Primary	03/06/92	<500	Unfiltered		CEP
RD-54A	Primary	09/12/93	-52 ± 500	Unfiltered		CEP
RD-54A	Primary	09/29/93	169 ± 500	Unfiltered		CEP
RD-54A	Primary	05/26/94	270 ± 160	Unfiltered		LAS
RD-54A	Primary	08/09/94	130 ± 160	Unfiltered		LAS
RD-54A	Primary	08/03/95	60 ± 220	Unfiltered		LAS
RD-54A	Primary	05/16/96	270 ± 200	Unfiltered		LAS
RD-54A	Primary	08/23/96	440 ± 150	Unfiltered		LAS
RD-54A	Primary	05/05/97	430 ± 150	Unfiltered		LAS
RD-54A	Primary	08/22/97	370 ± 160	Unfiltered		LAS
RD-54A	Primary	02/08/98	354 ± 130	Unfiltered		TN
RD-54A	Primary	08/07/98	497 ± 140	Unfiltered		TN
RD-54A	Primary	02/08/99	697 ± 160	Unfiltered		TN
RD-54A	Primary	08/18/99	491 ± 110	Unfiltered		TN
RD-54A	Primary	03/15/00	332 ± 120	Unfiltered		TR
RD-54A	Primary	10/26/01	139 ± 109	Unfiltered		DL
RD-54A	Primary	02/27/02	67 ± 56	Unfiltered		DL
RD-54A	Primary	08/14/02	105 ± 120	Unfiltered		ES
RD-54A(Z2)	Primary	02/18/03	10.7 ± 110	Unfiltered		ES
RD-54A(Z2)	Primary	08/26/03	25.3 ± 110 (U)	Unfiltered		ES
RD-54B	Primary	09/12/93	77 ± 500	Unfiltered		CEP
RD-54B	Primary	09/29/93	378 ± 500	Unfiltered		CEP
RD-54B	Primary	05/08/94	-20 ± 120	Unfiltered		LAS
RD-54B	Primary	08/08/94	-110 ± 120	Unfiltered		LAS
RD-54B	Primary	08/30/95	100 ± 240	Unfiltered		LAS
RD-54B	Primary	05/16/96	40 ± 180	Unfiltered		LAS
RD-54B	Primary	08/21/96	-27 ± 91	Unfiltered		LAS
RD-54B	Primary	08/22/97	-80 ± 100	Unfiltered		LAS
RD-54B	Primary	02/08/98	40.8 ± 110	Unfiltered		TN
RD-54B	Primary	08/07/98	26.4 ± 130	Unfiltered		TN
RD-54B	Primary	02/08/99	-59.8 ± 120	Unfiltered		TN
RD-54B	Primary	08/18/99	-6.88 ± 92	Unfiltered		TN
RD-54B	Primary	03/15/00	0 ± 0	Unfiltered		TR

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RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-54B	Primary	10/25/01	0.00 ± 79	Unfiltered		DL
RD-54B	Primary	02/27/02	191 ± 59	Unfiltered		DL
RD-54B	Primary	08/21/02	-21.9 ± 120	Unfiltered		ES
RD-54B	Primary	08/07/03	-31.7 ± 110 (U)	Unfiltered		ES
RD-54C	Primary	09/11/93	58 ± 500	Unfiltered		CEP
RD-54C	Primary	09/29/93	236 ± 500	Unfiltered		CEP
RD-54C	Primary	05/08/94	0 ± 120	Unfiltered		LAS
RD-54C	Primary	08/08/94	-30 ± 140	Unfiltered		LAS
RD-54C	Primary	08/30/95	-10 ± 230	Unfiltered		LAS
RD-54C	Primary	05/16/96	-40 ± 170	Unfiltered		LAS
RD-54C	Primary	08/23/96	50 ± 100	Unfiltered		LAS
RD-54C	Primary	05/05/97	20 ± 110	Unfiltered		LAS
RD-54C	Primary	08/24/97	10 ± 110	Unfiltered		LAS
RD-54C	Primary	02/08/98	38.3 ± 110	Unfiltered		TN
RD-54C	Primary	08/07/98	35.4 ± 130	Unfiltered		TN
RD-54C	Primary	02/09/99	81.0 ± 120	Unfiltered		TN
RD-54C	Primary	08/18/99	28.2 ± 96	Unfiltered		TN
RD-54C	Primary	03/15/00	28.8 ± 110	Unfiltered		TR
RD-54C	Primary	11/02/01	36 ± 81	Unfiltered		DL
RD-54C	Primary	02/27/02	221 ± 57	Unfiltered		DL
RD-54C	Primary	08/22/02	67.4 ± 130	Unfiltered		ES
RD-54C	Primary	02/26/03	-79.1 ± 110	Unfiltered		ES
RD-54C	Primary	08/26/03	-12.4 ± 110	Unfiltered		ES
RD-56A	Primary	05/10/94	-40 ± 110	Unfiltered		LAS
RD-56A	Primary	02/20/96	-10 ± 180	Unfiltered		LAS
RD-56A	Primary	02/06/97	96 ± 59	Unfiltered		LAS
RD-56A	Primary	05/28/98	16.2 ± 110	Unfiltered		TN
RD-56B	Primary	05/28/98	-35.2 ± 110	Unfiltered		TN
RD-57	Primary	03/16/94	-50 ± 100	Unfiltered		LAS
RD-57	Primary	05/10/94	-60 ± 110	Unfiltered		LAS
RD-57	Primary	08/18/94	60 ± 150	Unfiltered		LAS
RD-57	Primary	02/07/95	-100 ± 190	Unfiltered		LAS
RD-57	Primary	08/09/95	-110 ± 200	Unfiltered		LAS
RD-57	Primary	02/19/96	-150 ± 170	Unfiltered		LAS
RD-57	Primary	08/22/96	-19 ± 92	Unfiltered		LAS
RD-57	Primary	02/25/97	150 ± 130	Unfiltered		LAS
RD-57	Primary	08/27/97	0 ± 100	Unfiltered		LAS
RD-57	Primary	05/26/98	-144 ± 120	Unfiltered		TN
RD-57	Primary	08/17/98	-7.03 ± 130	Unfiltered		TN
RD-57	Primary	05/13/99	17.4 ± 100	Unfiltered		TN
RD-57	Primary	08/11/99	48.8 ± 94	Unfiltered		TN
RD-57	Primary	02/09/00	-84.4 ± 110	Unfiltered		TR
RD-57	Primary	08/08/00	-14.7 ± 130	Unfiltered		TR
RD-57	Primary	05/11/01	-35.8 ± 120	Unfiltered		ES
RD-57	Primary	10/31/01	0.00 ± 80	Unfiltered		DL
RD-57	Primary	02/14/02	10 ± 120	Unfiltered		DL
RD-57	Primary	08/14/02	0 ± 0	Unfiltered		ES
RD-57	Primary	01/29/03	-57.7 ± 110	Unfiltered		ES
RD-57(Z8)	Primary	04/30/03	18.8 ± 99 (U)	Unfiltered		ES
RD-57(Z8)	Primary	08/27/03	-24.8 ± 110 (U)	Unfiltered		ES
RD-59A	Primary	08/16/94	-70 ± 120	Unfiltered		LAS

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-59A	Primary	02/06/95	160 ± 220	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-59A	Primary	02/06/95	69.5 ± 7.2	Unfiltered		LAS
RD-59A	Dup	02/06/95	-140 ± 190	Unfiltered	Analysis conducted using electrolytic enrichment.	LAS
RD-59A	Primary	08/08/95	-100 ± 200	Unfiltered		LAS
RD-59A	Primary	03/12/96	29.4 ± 6.6	Unfiltered		LAS
RD-59A	Primary	08/21/96	-28 ± 91	Unfiltered		LAS
RD-59A	Primary	02/16/97	200 ± 150	Unfiltered		LAS
RD-59A	Primary	08/22/97	-30 ± 110	Unfiltered		LAS
RD-59A	Primary	08/19/98	-2.44 ± 130	Unfiltered		TN
RD-59A	Primary	02/16/99	107 ± 120	Unfiltered		TN
RD-59A	Primary	08/06/99	52.9 ± 95	Unfiltered		TN
RD-59A	Primary	03/14/00	19.2 ± 110	Unfiltered		TR
RD-59A	Primary	08/10/00	13.0 ± 140	Unfiltered		TR
RD-59A	Primary	05/16/01	-23.2 ± 120	Unfiltered		ES
RD-59A	Primary	11/12/01	968 ± 115	Unfiltered		DL
RD-59A	Primary	02/28/02	536 ± 115	Unfiltered		DL
RD-59A	Primary	08/08/02	74.2 ± 120	Unfiltered		ES
RD-59A	Primary	01/31/03	23.9 ± 110	Unfiltered		ES
RD-59A	Primary	05/15/03	29.7 ± 100 (U)	Unfiltered		ES
RD-59A	Split	05/15/03	-12.3 ± 51.5 (U)	Unfiltered		STL
RD-59A	Primary	08/08/03	-33.7 ± 110 (U)	Unfiltered		ES
RD-59A	Split	08/08/03	17.1 ± 49 (U)	Unfiltered		STL
RD-59A	Primary	11/14/03	-82.5 ± 110 (U)	Unfiltered		ES
RD-59A	Split	11/14/03	-8.74 ± 46.3 (U)	Unfiltered		STL
RD-59B	Primary	08/29/94	40 ± 150	Unfiltered		LAS
RD-59B	Primary	02/06/95	-150 ± 180	Unfiltered		LAS
RD-59B	Primary	08/08/95	-90 ± 200	Unfiltered		LAS
RD-59B	Primary	03/12/96	-80 ± 100	Unfiltered		LAS
RD-59B	Primary	08/21/96	38 ± 98	Unfiltered		LAS
RD-59B	Primary	02/16/97	20 ± 120	Unfiltered		LAS
RD-59B	Primary	08/22/97	-30 ± 110	Unfiltered		LAS
RD-59B	Primary	08/19/98	68.8 ± 130	Unfiltered		TN
RD-59B	Primary	02/16/99	26.3 ± 110	Unfiltered		TN
RD-59B	Primary	08/06/99	24.3 ± 93	Unfiltered		TN
RD-59B	Primary	03/14/00	-67.2 ± 100	Unfiltered		TR
RD-59B	Primary	08/10/00	-23.7 ± 130	Unfiltered		TR
RD-59B	Primary	02/17/01	-68.1 ± 120	Unfiltered		ES
RD-59B	Primary	11/12/01	101 ± 104	Unfiltered		DL
RD-59B	Primary	02/28/02	222 ± 58	Unfiltered		DL
RD-59B	Primary	08/08/02	55.1 ± 120	Unfiltered		ES
RD-59B	Primary	01/31/03	-31.1 ± 110	Unfiltered		ES
RD-59B	Primary	08/08/03	-21.2 ± 110 (U)	Unfiltered		ES
RD-59C	Primary	6/20/1994 (225-271')	20 ± 140	Unfiltered		LAS
RD-59C	Primary	08/16/94	-30 ± 130	Unfiltered		LAS
RD-59C	Primary	02/06/95	-50 ± 190	Unfiltered		LAS
RD-59C	Primary	08/08/95	-200 ± 190	Unfiltered		LAS
RD-59C	Primary	03/12/96	-60 ± 100	Unfiltered		LAS
RD-59C	Primary	08/21/96	50 ± 100	Unfiltered		LAS

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
RD-59C	Primary	02/16/97	40 ± 130	Unfiltered		LAS
RD-59C	Primary	08/22/97	-70 ± 110	Unfiltered		LAS
RD-59C	Primary	08/19/98	43.3 ± 120	Unfiltered		TN
RD-59C	Primary	02/16/99	30.6 ± 120	Unfiltered		TN
RD-59C	Primary	08/06/99	-30.5 ± 94	Unfiltered		TN
RD-59C	Primary	03/14/00	7.68 ± 110	Unfiltered		TR
RD-59C	Primary	08/10/00	54.4 ± 130	Unfiltered		TR
RD-59C	Primary	02/17/01	30.6 ± 130	Unfiltered		ES
RD-59C	Primary	11/12/01	132 ± 104	Unfiltered		DL
RD-59C	Primary	02/28/02	0 ± 59	Unfiltered		DL
RD-59C	Primary	08/08/02	-43.8 ± 120	Unfiltered		ES
RD-59C	Primary	01/31/03	1.97 ± 110	Unfiltered		ES
RD-59C	Primary	08/08/03	50.7 ± 110 (U)	Unfiltered		ES
RD-61	Primary	05/28/98	-50.5 ± 110	Unfiltered		TN
RD-63	Primary	05/19/94	40 ± 130	Unfiltered		LAS
RD-63	Primary	09/22/94	80 ± 150	Unfiltered		LAS
RD-63	Primary	10/06/94	60 ± 150	Unfiltered	Pilot extraction effluent.	LAS
RD-63	Primary	11/09/94	90 ± 180	Unfiltered		LAS
RD-63	Primary	01/04/95	350 ± 210	Unfiltered		LAS
RD-63	Primary	02/02/99	362 ± 110	Unfiltered		TN
RD-63	Primary	02/16/00	266 ± 120	Unfiltered		TR
RD-63	Primary	02/23/01	-26.9 ± 130	Unfiltered		ES
RD-63	Primary	02/14/02	41 ± 120	Unfiltered		DL
RD-63	Primary	02/05/03	152 ± 120	Unfiltered		ES
RD-64	Primary	05/10/01	181 ± 130	Unfiltered		ES
RD-64	Primary	02/28/02	204 ± 58	Unfiltered		DL
RD-64(Z6)	Primary	01/29/03	21.3 ± 110	Unfiltered		ES
RD-65	Primary	02/27/97	380 ± 160	Unfiltered		LAS
RD-65	Primary	02/07/98	322 ± 130	Unfiltered		TN
RD-69	Primary	05/28/98	68.6 ± 110	Unfiltered		TN
RD-74	Primary	05/13/99	30.2 ± 110	Unfiltered		TN
HAR-06	Primary	09/14/89	45.9 ± 133	Unfiltered		UST
HAR-06	Split	09/14/89	<1000	Unfiltered		TMA
HAR-07	Primary	09/09/89	-88.9 ± 128	Unfiltered		UST
HAR-07	Split	09/09/89	<1000	Unfiltered		TMA
HAR-16	Primary	09/09/89	-57.4 ± 126	Unfiltered		UST
HAR-16	Split	09/09/89	<1000	Unfiltered		TMA
HAR-18	Primary	09/11/89	-68.4 ± 133	Unfiltered		UST
HAR-18	Split	09/11/89	<1000	Unfiltered		TMA
HAR-19	Primary	09/09/89	329 ± 137	Unfiltered		UST
HAR-19	Split	09/09/89	<1000	Unfiltered		TMA
HAR-19	Primary	06/28/90	12.9 ± 212	Unfiltered		UST
HAR-20	Primary	09/09/89	-65.0 ± 125	Unfiltered		UST
HAR-20	Split	09/09/89	<1000	Unfiltered		TMA
HAR-21	Primary	09/09/89	-39.2 ± 121	Unfiltered		UST
HAR-21	Split	09/09/89	<1000	Unfiltered		TMA
WS-04A	Primary	09/09/89	-155 ± 125	Unfiltered		UST
WS-04A	Split	09/09/89	<1000	Unfiltered		TMA
WS-04A	Primary	12/06/90	-67.2 ± 195	Unfiltered		IT
WS-05	Primary	09/09/89	-216 ± 119	Unfiltered		UST

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
WS-05	Split	09/09/89	<1000	Unfiltered		TMA
WS-05	Primary	05/06/94	-40 ± 110	Unfiltered		LAS
WS-06	Primary	09/11/89	-128 ± 125	Unfiltered		UST
WS-06	Split	09/11/89	<1000	Unfiltered		TMA
WS-07	Primary	12/06/90	187 ± 235	Unfiltered		IT
WS-07	Dup	12/06/90	78.0 ± 229	Unfiltered		IT
WS-07	Primary	03/08/91	-70.2 ± 178	Unfiltered		IT
WS-07	Primary	12/07/91	-48.1 ± 209	Unfiltered		IT
WS-07	Split	12/07/91	<500	Unfiltered		CEP
WS-07	Primary	03/25/92	<500	Unfiltered		CEP
WS-08	Primary	09/09/89	-258 ± 138	Unfiltered		UST
WS-08	Split	09/09/89	<1000	Unfiltered		TMA
WS-09A	Primary	09/12/89	-53.4 ± 127	Unfiltered		UST
WS-09A	Split	09/12/89	<1000	Unfiltered		TMA
OFF-SITE PRIVATE WELLS AND SPRINGS						
OS-01	Primary	09/13/89	-227 ± 121	Unfiltered		UST
OS-01	Split	09/13/89	<1000	Unfiltered		TMA
OS-01	Primary	12/11/90	-17.5 ± 207	Unfiltered		IT
OS-01	Primary	03/09/91	-109 ± 185	Unfiltered		IT
OS-01	Primary	09/09/91	63.8 ± 201	Unfiltered		IT
OS-01	Primary	12/09/91	-49.0 ± 209	Unfiltered		IT
OS-01	Primary	06/09/92	-129 ± 489	Unfiltered		CEP
OS-01	Primary	09/15/92	411 ± 500	Unfiltered		CEP
OS-01	Primary	12/17/92	187 ± 498	Unfiltered		CEP
OS-01	Primary	06/22/93	-17 ± 446	Unfiltered		CEP
OS-01	Primary	08/23/93	-436 ± 500	Unfiltered		CEP
OS-01	Primary	11/08/93	60 ± 120	Unfiltered		LAS
OS-01	Primary	02/23/94	-70 ± 130	Unfiltered		LAS
OS-01	Primary	08/15/94	-70 ± 120	Unfiltered		LAS
OS-01	Primary	02/06/95	10 ± 200	Unfiltered		LAS
OS-01	Primary	08/08/95	-110 ± 200	Unfiltered		LAS
OS-01	Primary	08/21/96	-20 ± 110	Unfiltered		LAS
OS-02	Primary	09/13/89	-90.8 ± 128	Unfiltered		UST
OS-02	Split	09/13/89	<1000	Unfiltered		TMA
OS-02	Primary	12/11/90	-39.7 ± 206	Unfiltered		IT
OS-02	Primary	03/08/91	86.5 ± 186	Unfiltered		IT
OS-02	Dup	03/08/91	-80.4 ± 186	Unfiltered		IT
OS-02	Primary	09/09/91	0.00 ± 198	Unfiltered		IT
OS-02	Primary	12/09/91	-61.0 ± 208	Unfiltered		IT
OS-02	Primary	06/09/92	348 ± 493	Unfiltered		CEP
OS-02	Primary	09/15/92	299 ± 500	Unfiltered		CEP
OS-02	Primary	12/17/92	-607 ± 520	Unfiltered		CEP
OS-02	Primary	06/22/93	74 ± 500	Unfiltered		CEP
OS-02	Primary	08/23/93	51 ± 426	Unfiltered		CEP
OS-02	Primary	11/08/93	20 ± 120	Unfiltered		LAS
OS-02	Primary	02/23/94	-20 ± 140	Unfiltered		LAS
OS-02	Primary	08/15/94	10 ± 140	Unfiltered		LAS
OS-02	Primary	02/06/95	-20 ± 200	Unfiltered		LAS
OS-02	Primary	08/08/95	-50 ± 200	Unfiltered		LAS
OS-02	Primary	08/21/96	70 ± 120	Unfiltered		LAS
OS-02	Primary	08/22/97	-40 ± 110	Unfiltered		LAS

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
OS-02	Primary	08/19/98	-83.2 ± 120	Unfiltered		TN
OS-03	Primary	09/13/89	7.49 ± 132	Unfiltered		UST
OS-03	Split	09/13/89	<1000	Unfiltered		TMA
OS-03	Primary	12/11/90	-35.1 ± 207	Unfiltered		IT
OS-03	Primary	03/08/91	44.4 ± 192	Unfiltered		IT
OS-03	Primary	12/09/91	-9.24 ± 211	Unfiltered		IT
OS-03	Primary	06/09/92	-223 ± 485	Unfiltered		CEP
OS-03	Primary	06/22/93	104 ± 500	Unfiltered		CEP
OS-03	Primary	08/23/93	-120 ± 421	Unfiltered		CEP
OS-03	Primary	11/08/93	80 ± 140	Unfiltered		LAS
OS-03	Primary	02/23/94	0 ± 140	Unfiltered		LAS
OS-03	Primary	08/15/94	-60 ± 130	Unfiltered		LAS
OS-03	Primary	02/06/95	-140 ± 190	Unfiltered		LAS
OS-03	Primary	08/08/95	150 ± 230	Unfiltered		LAS
OS-03	Primary	08/21/96	60 ± 130	Unfiltered		LAS
OS-03	Primary	08/22/97	-73 ± 99	Unfiltered		LAS
OS-03	Primary	08/19/98	63.1 ± 130	Unfiltered		TN
OS-04	Primary	09/13/89	71.2 ± 135	Unfiltered		UST
OS-04	Split	09/13/89	<1000	Unfiltered		TMA
OS-04	Primary	12/11/90	-26.8 ± 208	Unfiltered		IT
OS-04	Primary	06/09/92	169 ± 488	Unfiltered		CEP
OS-04	Primary	06/22/93	-385 ± 500	Unfiltered		CEP
OS-04	Primary	08/23/93	-477 ± 500	Unfiltered		CEP
OS-04	Primary	02/23/94	-70 ± 130	Unfiltered		LAS
OS-04	Primary	08/15/94	-80 ± 120	Unfiltered		LAS
OS-04	Primary	02/06/95	-20 ± 200	Unfiltered		LAS
OS-04	Primary	08/08/95	-90 ± 210	Unfiltered		LAS
OS-04	Primary	08/21/96	110 ± 130	Unfiltered		LAS
OS-04	Primary	08/22/97	0 ± 120	Unfiltered		LAS
OS-04	Primary	08/19/98	-2.28 ± 120	Unfiltered		TN
OS-05	Primary	09/13/89	-52.4 ± 129	Unfiltered		UST
OS-05	Split	09/13/89	<1000	Unfiltered		TMA
OS-05	Primary	12/11/90	-80.3 ± 205	Unfiltered		IT
OS-05	Primary	03/08/91	-162 ± 182	Unfiltered		IT
OS-05	Primary	09/09/91	129 ± 204	Unfiltered		IT
OS-05	Primary	12/09/91	61.9 ± 214	Unfiltered		IT
OS-05	Primary	06/09/92	91 ± 492	Unfiltered		CEP
OS-05	Primary	09/15/92	620 ± 509	Unfiltered		CEP
OS-05	Split	09/15/92	-220 ± 270	Unfiltered		BL
OS-05	Primary	12/17/92	20 ± 498	Unfiltered		CEP
OS-05	Primary	06/22/93	-628 ± 500	Unfiltered		CEP
OS-05	Primary	08/23/93	-89 ± 434	Unfiltered		CEP
OS-05	Primary	11/08/93	20 ± 120	Unfiltered		LAS
OS-05	Primary	02/23/94	50 ± 150	Unfiltered		LAS
OS-05	Primary	08/08/95	60 ± 210	Unfiltered		LAS
OS-05	Primary	08/21/96	-20 ± 110	Unfiltered		LAS
OS-05	Primary	08/22/97	-40 ± 110	Unfiltered		LAS
OS-05	Primary	08/19/98	-39.4 ± 120	Unfiltered		TN
OS-05A	Primary	02/06/95	-60 ± 190	Unfiltered		LAS
OS-05A	Primary	08/08/95	330 ± 250	Unfiltered		LAS
OS-08	Primary	09/13/89	101 ± 140	Unfiltered		UST

See last page of Table E-II for footnotes and explanations.

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TABLE E-II

RESULTS OF ANALYSES FOR TRITIUM IN GROUNDWATER
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Concentration (picoCuries per liter)	Sample Handling	Sample Comments	Laboratory
OS-08	Split	09/13/89	<1000	Unfiltered		TMA
OS-08	Primary	06/09/92	-172 ± 490	Unfiltered		CEP
OS-08	Primary	06/22/93	-332 ± 500	Unfiltered		CEP
OS-08	Primary	08/15/94	-10 ± 140	Unfiltered		LAS
OS-10	Primary	09/13/89	-121 ± 126	Unfiltered		UST
OS-10	Split	09/13/89	<1000	Unfiltered		TMA
OS-10	Primary	12/09/91	-120 ± 205	Unfiltered		IT
OS-10	Primary	08/15/94	10 ± 140	Unfiltered		LAS
OS-15	Primary	12/10/91	127 ± 224	Unfiltered		IT
OS-16	Primary	09/14/89	-100 ± 127	Unfiltered		UST
OS-16	Split	09/14/89	<1000	Unfiltered		TMA
OS-16	Primary	09/09/91	-93.3 ± 193	Unfiltered		IT
OS-16	Primary	12/10/91	148 ± 226	Unfiltered		IT
OS-16	Primary	03/12/92	<500	Unfiltered		CEP
OS-17	Primary	09/13/89	37.5 ± 132	Unfiltered		UST
OS-17	Split	09/13/89	<1000	Unfiltered		TMA
OS-17	Primary	09/12/91	306 ± 230	Unfiltered		IT
OS-17	Primary	12/10/91	31.7 ± 219	Unfiltered		IT
OS-17	Primary	03/12/92	<500	Unfiltered		CEP
OS-21	Primary	09/09/89	-160 ± 121	Unfiltered		UST
OS-21	Split	09/09/89	<1000	Unfiltered		TMA
OS-21	Primary	03/09/91	-38.8 ± 188	Unfiltered		IT
OS-21	Primary	12/10/91	-165 ± 209	Unfiltered		IT
OS-21	Primary	03/12/92	<500	Unfiltered		CEP
OS-21	Primary	03/19/93	119 ± 490	Unfiltered		CEP
Calleguas	Primary	12/14/90	117 ± 230	Unfiltered		IT
Calleguas	Primary	03/12/92	<500	Unfiltered		CEP

See last page of Table E-II for footnotes and explanations.

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TABLE E-II
FOOTNOTES AND EXPLANATIONS

(<)	=	Less than; numerical value represents limit of detection for that analysis.
(U)	=	The result is less than the MDA (Minimum Detectable Activity).
Z	=	FLUTe sample port number.
BL	=	Barringer Laboratories, Inc., Golden, Colorado.
CEP	=	Controls for Environmental Pollution, Santa Fe, New Mexico.
DL	=	Davi Laboratories, Pinole, California.
ES	=	Eberline Services (formerly Thermo Retec), Richmond, California.
IT	=	International Technologies Analytical Services (formerly UST), Richland, Washington.
LAS	=	LAS Laboratories, Inc. (formerly Lockheed Martin), Las Vegas, Nevada.
STL	=	Severn Trent Laboratories, Richland, Washington.
TEL	=	Teledyne Isotopes, Westwood, New Jersey.
TMA	=	Thermoanalytical, Inc. (TMA/NORCAL), Richmond, California.
TN	=	Thermo NUtech, Richmond, California.
TR	=	Thermo Retec (formerly Thermo NUtech), Richmond, California.
UST	=	United States Testing Laboratory, Richland, Washington.
Primary	=	Primary sample
Dup	=	Sample duplicate
Split	=	Sample split

NOTE: Samples analyzed for tritium by EPA Method 906.0.

Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
Shallow Wells						
SH-11	Primary	10/17/89	ND	---	Filtered	UST
SH-11	Primary	10/31/89	ND	---	Unfiltered	UST
SH-11	Primary	10/31/89	ND	---	Filtered	UST
RS-05	Primary	10/31/89	ND	---	Unfiltered	UST
RS-05	Primary	10/31/89	ND	---	Filtered	UST
RS-11	Primary	12/06/90	ND	---	Filtered	IT
RS-11	Primary	03/04/91	ND	---	Filtered	IT
RS-11	Primary	12/07/91	ND	---	Filtered	IT
RS-11	Primary	03/05/92	ND	---	Filtered	CEP
RS-11	Primary	02/06/99	ND	---	Filtered	TN
RS-11	Primary	02/15/00	ND	---	Filtered	TR
RS-11	Primary	02/06/01	ND	---	Filtered	ES
RS-11	Primary	05/01/03	ND	---	Filtered	ES
RS-16	Primary	03/09/92	ND	---	Filtered	CEP
RS-17	Primary	12/10/90	ND	---	Filtered	IT
RS-17	Primary	12/07/91	ND	---	Filtered	IT
RS-17	Primary	12/05/92	ND	---	Filtered	CEP
RS-18	Primary	03/10/91	ND	---	Filtered	IT
RS-18	Duplicate	03/10/91	ND	---	Filtered	IT
RS-18	Primary	03/04/92	ND	---	Filtered	CEP
RS-18	Primary	09/10/92	K-40	29 ± 6	Filtered	CEP
RS-18	Primary	12/15/92	ND	---	Filtered	CEP
RS-18	Split	12/15/92	ND	<5.2	Filtered	BL
RS-18	Primary	06/23/93	ND	---	Filtered	CEP
RS-18	Primary	11/06/93	ND	---	Filtered	LAS
RS-18	Primary	05/04/94	ND	---	Filtered	LAS
RS-18	Primary	02/17/95	ND	---	Filtered	LAS
RS-18	Primary	08/10/95	ND	---	Filtered	LAS
RS-18	Primary	05/16/96	ND	---	Filtered	LAS
RS-18	Primary	02/03/97	ND	---	Filtered	LAS
RS-18	Primary	02/05/98	ND	---	Filtered	TN
RS-18	Primary	08/05/98	ND	---	Filtered	TN
RS-18	Primary	05/12/99	ND	---	Filtered	TN
RS-18	Primary	05/09/00	ND	---	Filtered	TR
RS-18	Primary	02/19/01	ND	---	Filtered	ES
RS-18	Primary	05/02/03	ND	---	Filtered	ES
RS-25	Primary	02/25/03	ND	---	Filtered	ES
RS-27	Primary	03/04/91	ND	---	Filtered	CEP
RS-28	Primary	10/19/89	ND	---	Filtered	UST
RS-28	Primary	11/01/89	ND	---	Unfiltered	UST
RS-28	Primary	11/01/89	ND	---	Filtered	UST
RS-28	Primary	12/06/90	ND	---	Filtered	IT
RS-28	Primary	03/09/91	ND	---	Filtered	IT
RS-28	Primary	12/06/91	ND	---	Filtered	IT
RS-28	Primary	03/09/92	ND	---	Filtered	CEP
RS-28	Primary	06/22/93	ND	---	Filtered	CEP

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TABLE E-III
RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RS-28	Primary	11/06/93	ND	---	Filtered	LAS
RS-28	Primary	05/07/94	ND	---	Filtered	LAS
RS-28	Primary	05/17/95	ND	---	Filtered	LAS
RS-28	Primary	11/08/95	ND	---	Filtered	LAS
RS-28	Primary	05/16/96	ND	---	Filtered	LAS
RS-28	Primary	05/08/98	ND	---	Filtered	TN
RS-28	Primary	11/16/98	ND	---	Filtered	TN
RS-28	Primary	05/05/00	ND	---	Filtered	TR
RS-28	Primary	05/10/01	ND	---	Filtered	ES
RS-54	Primary	09/11/93	ND	---	Filtered	CEP
RS-54	Primary	09/29/93	ND	---	Filtered	CEP
RS-54	Primary	05/07/94	ND	---	Filtered	LAS
RS-54	Primary	08/07/94	ND	---	Filtered	LAS
RS-54	Primary	08/03/95	ND	---	Filtered	LAS
RS-54	Primary	05/16/96	ND	---	Filtered	LAS
RS-54	Primary	08/23/96	ND	---	Filtered	LAS
RS-54	Primary	05/03/97	ND	---	Filtered	LAS
RS-54	Primary	08/02/97	ND	---	Filtered	LAS
RS-54	Primary	08/27/97	ND	---	Filtered	LAS
RS-54	Primary	08/27/97	ND	---	Unfiltered	LAS
RS-54	Primary	02/08/98	ND	---	Filtered	TN
RS-54	Primary	08/04/98	ND	---	Filtered	TN
RS-54	Primary	02/02/99	ND	---	Unfiltered	TN
RS-54	Primary	08/18/99	ND	---	Filtered	TN
RS-54	Primary	03/15/00	ND	---	Filtered	TR
RS-54	Primary	11/01/01	ND	---	Filtered	DL
RS-54	Primary	03/01/02	ND	---	Filtered	DL
RS-54	Primary	11/07/02	ND	---	Filtered	ES
ES-31	Primary	12/10/90	ND	---	Filtered	IT
ES-31	Primary	03/04/91	ND	---	Filtered	IT
ES-31	Duplicate	03/04/91	ND	---	Filtered	IT
ES-31	Primary	06/03/91	ND	---	Filtered	IT
ES-31	Primary	06/06/91	ND	---	Filtered	IT
ES-31	Primary	12/07/91	ND	---	Filtered	IT
ES-31	Primary	03/05/92	ND	---	Filtered	CEP
ES-31	Primary	02/06/99	ND	---	Filtered	TN
ES-31	Primary	02/06/00	ND	---	Filtered	TR
ES-31	Primary	02/15/01	ND	---	Filtered	ES
ES-31	Primary	02/18/02	ND	---	Filtered	DL
ES-31	Primary	02/19/03	ND	---	Filtered	ES
HAR-14	Primary	09/12/89	ND	---	Unfiltered	UST
HAR-14	Primary	09/12/89	ND	---	Filtered	UST
HAR-14	Split	09/12/89	ND	---	Filtered	TMA
HAR-14	Split	09/12/89	ND	---	Unfiltered	TMA
Chatsworth Formation Wells						
RD-06	Primary	10/18/89	ND	---	Unfiltered	UST
RD-06	Primary	10/31/89	ND	---	Unfiltered	UST

See last page of Table E-III for footnotes and explanations.

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RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-06	Primary	10/31/89	ND	---	Filtered	UST
RD-06	Primary	03/06/91	ND	---	Filtered	IT
RD-06	Primary	03/10/92	ND	---	Filtered	CEP
RD-07	Primary	12/05/90	ND	---	Filtered	IT
RD-07	Primary	03/09/91	ND	---	Filtered	IT
RD-07	Primary	12/07/91	ND	---	Filtered	IT
RD-07	Primary	03/06/92	ND	---	Filtered	CEP
RD-07	Primary	08/25/97	ND	---	Filtered	LAS
RD-07	Primary	08/25/97	ND	---	Unfiltered	LAS
RD-07	Primary	02/06/99	ND	---	Filtered	TN
RD-07	Primary	03/16/00	ND	---	Filtered	TR
RD-07	Primary	02/23/01	ND	---	Filtered	ES
RD-07	Primary	02/22/02	ND	---	Filtered	DL
RD-07	Primary	01/29/03	ND	---	Filtered	ES
RD-10	Primary	03/06/91	ND	---	Filtered	IT
RD-10	Primary	03/07/92	ND	---	Filtered	CEP
RD-13	Primary	09/12/89	ND	---	Unfiltered	UST
RD-13	Primary	09/12/89	ND	---	Filtered	UST
RD-13	Split	09/12/89	ND	---	Unfiltered	TMA
RD-13	Split	09/12/89	ND	---	Filtered	TMA
RD-13	Primary	10/17/89	ND	---	Filtered	UST
RD-13	Primary	10/31/89	ND	---	Filtered	UST
RD-13	Primary	12/06/90	ND	---	Filtered	IT
RD-13	Primary	03/08/91	ND	---	Filtered	IT
RD-13	Primary	12/10/91	ND	---	Filtered	IT
RD-13	Primary	03/12/92	ND	---	Filtered	CEP
RD-13	Primary	08/26/97	ND	---	Filtered	LAS
RD-13	Primary	08/26/97	ND	---	Unfiltered	LAS
RD-14	Primary	10/18/89	ND	---	Unfiltered	UST
RD-14	Primary	10/18/89	ND	---	Filtered	UST
RD-14	Primary	10/31/89	ND	---	Unfiltered	UST
RD-14	Primary	10/31/89	ND	---	Filtered	UST
RD-14	Primary	12/07/90	ND	---	Filtered	IT
RD-14	Primary	03/09/91	ND	---	Filtered	IT
RD-14	Primary	12/06/91	ND	---	Filtered	IT
RD-14	Primary	03/05/92	ND	---	Filtered	CEP
RD-15	Primary	10/19/89	ND	---	Filtered	UST
RD-15	Primary	12/07/90	ND	---	Filtered	IT
RD-15	Primary	03/10/91	ND	---	Filtered	IT
RD-15	Primary	12/06/91	ND	---	Filtered	IT
RD-15	Primary	03/11/92	ND	---	Filtered	CEP
RD-15	Split	03/11/92	ND	---	Filtered	TEL
RD-15	Primary	05/10/01	ND	---	Filtered	ES
RD-15	Primary	03/06/02	ND	---	Filtered	DL
RD-15	Primary	02/26/03	ND	---	Filtered	ES
RD-16	Primary	10/25/89	ND	---	Filtered	UST
RD-16	Primary	12/07/90	ND	---	Filtered	IT

See last page of Table E-III for footnotes and explanations.

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RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-16	Primary	03/09/91	ND	---	Filtered	IT
RD-16	Primary	12/05/91	ND	---	Filtered	IT
RD-16	Primary	06/06/92	ND	---	Filtered	CEP
RD-16	Primary	05/27/98	ND	---	Filtered	TN
RD-17	Primary	10/18/89	ND	---	Filtered	UST
RD-17	Duplicate	10/18/89	ND	---	Filtered	UST
RD-17	Primary	10/31/89	ND	---	Unfiltered	UST
RD-17	Primary	12/04/90	ND	---	Filtered	IT
RD-17	Primary	03/05/91	ND	---	Filtered	IT
RD-17	Primary	12/07/91	ND	---	Filtered	IT
RD-17	Split	12/07/91	ND	---	Filtered	CEP
RD-17	Primary	03/04/92	ND	---	Filtered	CEP
RD-17	Primary	02/08/99	ND	---	Filtered	TN
RD-17	Primary	02/21/00	ND	---	Filtered	TR
RD-17	Primary	02/14/01	ND	---	Filtered	ES
RD-17	Primary	03/01/02	ND	---	Filtered	DL
RD-17	Primary	02/24/03	ND	---	Filtered	ES
RD-18	Primary	10/26/89	ND	---	Filtered	UST
RD-18	Primary	12/08/90	ND	---	Filtered	IT
RD-18	Primary	03/09/91	ND	---	Filtered	IT
RD-18	Primary	12/11/91	ND	---	Filtered	IT
RD-18	Primary	03/12/92	ND	---	Filtered	CEP
RD-19	Primary	10/26/89	ND	---	Filtered	UST
RD-19	Primary	12/08/90	ND	---	Filtered	IT
RD-19	Duplicate	12/08/90	ND	---	Filtered	IT
RD-19	Primary	03/08/91	ND	---	Filtered	IT
RD-19	Duplicate	03/08/91	ND	---	Filtered	IT
RD-19	Primary	12/11/91	ND	---	Filtered	IT
RD-19	Primary	03/12/92	ND	---	Filtered	CEP
RD-20	Primary	10/17/89	ND	---	Filtered	UST
RD-20	Primary	10/31/89	ND	---	Unfiltered	UST
RD-20	Primary	12/07/90	ND	---	Filtered	IT
RD-20	Primary	12/10/90	ND	---	Filtered	IT
RD-20	Primary	03/05/91	ND	---	Filtered	IT
RD-20	Primary	12/10/91	ND	---	Filtered	IT
RD-20	Primary	03/04/92	ND	---	Filtered	CEP
RD-21	Primary	10/31/89	ND	---	Filtered	UST
RD-21	Primary	12/03/90	ND	---	Filtered	IT
RD-21	Primary	03/08/91	ND	---	Filtered	IT
RD-21	Primary	12/05/91	ND	---	Filtered	IT
RD-21	Primary	03/04/92	ND	---	Filtered	CEP
RD-21	Primary	03/06/93	ND	---	Filtered	CEP
RD-21	Primary	06/22/93	ND	---	Filtered	CEP
RD-21	Primary	08/06/93	ND	---	Filtered	CEP
RD-21	Primary	11/06/93	ND	---	Filtered	LAS
RD-21	Primary	02/25/94	ND	---	Filtered	LAS
RD-21	Primary	08/08/94	ND	---	Filtered	LAS

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-21	Primary	02/08/95	ND	---	Filtered	LAS
RD-21	Primary	08/31/95	ND	---	Filtered	LAS
RD-21	Primary	02/16/96	ND	---	Filtered	LAS
RD-21	Primary	08/18/96	ND	---	Filtered	LAS
RD-21	Primary	02/06/97	ND	---	Filtered	LAS
RD-21	Primary	02/09/98	ND	---	Filtered	TN
RD-21	Primary	02/16/99	ND	---	Filtered	TN
RD-21	Primary	03/15/00	ND	---	Filtered	TR
RD-21	Primary	10/24/01	ND	---	Filtered	DL
RD-21	Primary	03/06/02	ND	---	Filtered	DL
RD-21	Primary	02/25/03	ND	---	Filtered	ES
RD-22	Primary	10/19/89	ND	---	Filtered	UST
RD-22	Primary	12/04/90	ND	---	Filtered	IT
RD-22	Duplicate	12/04/90	ND	---	Filtered	IT
RD-22	Primary	03/11/91	ND	---	Filtered	IT
RD-22	Primary	12/06/91	ND	---	Filtered	IT
RD-22	Primary	06/05/92	ND	---	Filtered	CEP
RD-22	Primary	03/20/93	ND	---	Filtered	CEP
RD-22	Primary	06/22/93	ND	---	Filtered	CEP
RD-22	Primary	08/05/93	ND	---	Filtered	CEP
RD-22	Primary	11/21/93	ND	---	Filtered	LAS
RD-22	Primary	02/24/94	ND	---	Filtered	LAS
RD-22	Primary	08/09/94	ND	---	Filtered	LAS
RD-22	Primary	02/17/95	ND	---	Filtered	LAS
RD-22	Primary	08/29/95	ND	---	Filtered	LAS
RD-22	Primary	02/16/96	ND	---	Filtered	LAS
RD-22	Primary	08/18/96	ND	---	Filtered	LAS
RD-22	Primary	02/26/97	ND	---	Filtered	LAS
RD-22	Primary	05/28/98	ND	---	Filtered	TN
RD-22	Primary	02/17/99	ND	---	Filtered	TN
RD-22	Primary	02/06/00	ND	---	Filtered	TR
RD-22	Primary	02/16/01	ND	---	Filtered	ES
RD-22	Primary	02/20/02	ND	---	Filtered	DL
RD-22	Primary	02/24/03	ND	---	Filtered	ES
RD-23	Primary	11/01/89	ND	---	Filtered	UST
RD-23	Primary	06/29/90	ND	---	Filtered	UST
RD-23	Primary	12/05/90	ND	---	Filtered	IT
RD-23	Primary	03/11/91	ND	---	Filtered	IT
RD-23	Duplicate	03/11/91	ND	---	Filtered	IT
RD-23	Primary	12/05/91	ND	---	Filtered	IT
RD-23	Primary	03/04/92	ND	---	Filtered	CEP
RD-23	Primary	03/21/93	ND	---	Filtered	CEP
RD-23	Primary	06/23/93	ND	---	Filtered	CEP
RD-23	Primary	08/06/93	ND	---	Filtered	CEP
RD-23	Primary	11/06/93	ND	---	Filtered	LAS
RD-23	Primary	02/25/94	ND	---	Filtered	LAS
RD-23	Primary	08/08/94	ND	---	Filtered	LAS

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-23	Primary	11/22/94	ND	---	Filtered	LAS
RD-23	Primary	02/05/95	ND	---	Filtered	LAS
RD-23	Primary	08/03/95	ND	---	Filtered	LAS
RD-23	Primary	02/16/96	ND	---	Filtered	LAS
RD-23	Primary	08/18/96	ND	---	Filtered	LAS
RD-23	Primary	02/27/97	ND	---	Filtered	LAS
RD-23	Primary	02/07/98	ND	---	Filtered	TN
RD-23	Primary	02/08/99	ND	---	Filtered	TN
RD-23	Primary	02/05/00	ND	---	Filtered	TR
RD-23	Primary	10/25/01	ND	---	Filtered	DL
RD-23	Primary	03/01/02	ND	---	Filtered	DL
RD-23	Primary	02/26/03	ND	---	Filtered	ES
RD-24	Primary	09/12/89	ND	---	Unfiltered	UST
RD-24	Primary	09/12/89	ND	---	Filtered	UST
RD-24	Split	09/12/89	ND	---	Unfiltered	TMA
RD-24	Split	09/12/89	ND	---	Filtered	TMA
RD-24	Primary	10/17/89	ND	---	Filtered	UST
RD-24	Primary	10/31/89	ND	---	Unfiltered	UST
RD-24	Primary	12/05/90	ND	---	Filtered	IT
RD-24	Primary	03/06/91	ND	---	Filtered	IT
RD-24	Primary	12/11/91	ND	---	Filtered	IT
RD-24	Primary	03/06/92	ND	---	Filtered	CEP
RD-24	Primary	02/23/94	ND	---	Filtered	LAS
RD-24	Primary	08/08/94	ND	---	Filtered	LAS
RD-24	Primary	02/16/95	ND	---	Filtered	LAS
RD-24	Primary	02/07/96	ND	---	Filtered	LAS
RD-24	Primary	02/07/97	ND	---	Filtered	LAS
RD-24	Primary	02/18/98	ND	---	Filtered	TN
RD-24	Primary	05/05/98	ND	---	Filtered	TN
RD-24	Primary	02/02/99	ND	---	Filtered	TN
RD-24	Primary	08/11/99	ND	---	Filtered	TN
RD-24	Primary	02/03/00	ND	---	Filtered	TR
RD-24	Primary	08/04/00	ND	---	Filtered	TR
RD-24	Primary	02/06/01	ND	---	Filtered	ES
RD-24	Primary	02/25/02	ND	---	Filtered	DL
RD-24	Primary	11/06/02	ND	---	Filtered	ES
RD-24	Primary	02/12/03	ND	---	Filtered	ES
RD-24	Primary	11/14/03	ND	---	Filtered	ES
RD-24	Split	11/14/03	ND	---	Filtered	STL
RD-25	Primary	09/12/89	ND	---	Unfiltered	UST
RD-25	Primary	09/12/89	ND	---	Filtered	UST
RD-25	Split	09/12/89	ND	---	Unfiltered	TMA
RD-25	Split	09/12/89	ND	---	Filtered	TMA
RD-25	Primary	10/31/89	ND	---	Unfiltered	UST
RD-25	Primary	12/05/90	ND	---	Filtered	IT
RD-25	Primary	03/06/91	ND	---	Filtered	IT
RD-25	Primary	12/10/91	ND	---	Filtered	IT

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-25	Primary	03/06/92	ND	---	Filtered	CEP
RD-25	Primary	02/28/94	ND	---	Filtered	LAS
RD-25	Primary	08/17/94	ND	---	Filtered	LAS
RD-25	Primary	02/09/95	ND	---	Filtered	LAS
RD-25	Primary	08/18/95	ND	---	Filtered	LAS
RD-25	Primary	02/06/96	ND	---	Filtered	LAS
RD-25	Primary	08/20/96	ND	---	Filtered	LAS
RD-25	Primary	02/07/97	ND	---	Filtered	LAS
RD-25	Primary	08/21/97	ND	---	Filtered	LAS
RD-25	Primary	02/05/98	ND	---	Filtered	TN
RD-25	Primary	08/18/98	ND	---	Filtered	TN
RD-25	Primary	02/16/99	ND	---	Filtered	TN
RD-25	Primary	08/19/99	ND	---	Filtered	TN
RD-25	Primary	02/16/00	ND	---	Filtered	TR
RD-25	Primary	08/09/00	ND	---	Filtered	TR
RD-25	Primary	02/07/01	ND	---	Filtered	ES
RD-25	Primary	10/25/01	ND	---	Filtered	DL
RD-25	Primary	03/07/02	ND	---	Filtered	DL
RD-25	Primary	11/06/02	ND	---	Filtered	ES
RD-25	Primary	02/24/03	ND	---	Filtered	ES
RD-25	Primary	11/13/03	ND	---	Filtered	ES
RD-26	Primary	10/31/89	ND	---	Unfiltered	UST
RD-26	Primary	12/04/90	ND	---	Filtered	IT
RD-26	Primary	03/07/91	ND	---	Filtered	IT
RD-26	Primary	03/11/91	ND	---	Filtered	CEP
RD-27	Primary	10/19/89	ND	---	Unfiltered	UST
RD-27	Primary	12/04/90	ND	---	Filtered	IT
RD-27	Primary	03/07/91	ND	---	Filtered	IT
RD-27	Primary	12/06/91	ND	---	Filtered	IT
RD-27	Primary	03/09/92	ND	---	Filtered	CEP
RD-27	Primary	02/05/96	ND	---	Filtered	LAS
RD-27	Primary	08/27/97	ND	---	Filtered	LAS
RD-27	Primary	08/27/97	ND	---	Unfiltered	LAS
RD-27	Primary	02/16/99	ND	---	Filtered	TN
RD-27	Primary	08/17/99	ND	---	Filtered	TN
RD-27	Primary	02/21/00	ND	---	Filtered	TR
RD-27	Primary	08/04/00	ND	---	Filtered	TR
RD-27	Primary	02/14/01	ND	---	Filtered	ES
RD-27	Primary	10/27/01	ND	---	Filtered	DL
RD-27	Primary	03/06/02	ND	---	Filtered	DL
RD-27	Primary	08/22/02	ND	---	Filtered	ES
RD-27	Primary	05/14/03	ND	---	Filtered	ES
RD-27	Primary	11/14/03	ND	---	Filtered	ES
RD-27	Split	11/14/03	ND	---	Filtered	STL
RD-28	Primary	09/13/89	ND	---	Filtered	UST
RD-28	Primary	09/13/89	ND	---	Unfiltered	UST
RD-28	Split	09/13/89	ND	---	Unfiltered	TMA

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-28	Split	09/13/89	ND	---	Filtered	TMA
RD-28	Primary	10/19/89	ND	---	Filtered	UST
RD-28	Primary	12/05/90	ND	---	Filtered	IT
RD-28	Primary	03/06/91	ND	---	Filtered	IT
RD-28	Primary	12/10/91	ND	---	Filtered	IT
RD-28	Split	12/10/91	ND	---	Filtered	CEP
RD-28	Primary	03/06/92	ND	---	Filtered	CEP
RD-28	Split	03/06/92	ND	---	Filtered	TEL
RD-28	Primary	03/17/93	ND	---	Filtered	CEP
RD-28	Primary	02/24/94	ND	---	Filtered	LAS
RD-28	Primary	08/17/94	ND	---	Filtered	LAS
RD-28	Primary	02/09/95	ND	---	Filtered	LAS
RD-28	Primary	08/18/95	ND	---	Filtered	LAS
RD-28	Primary	02/06/96	ND	---	Filtered	LAS
RD-28	Primary	08/20/96	ND	---	Filtered	LAS
RD-28	Primary	02/06/97	ND	---	Filtered	LAS
RD-28	Primary	08/28/97	ND	---	Filtered	LAS
RD-28	Primary	08/28/97	ND	---	Unfiltered	LAS
RD-28	Primary	02/05/98	ND	---	Filtered	TN
RD-28	Primary	08/18/98	ND	---	Filtered	TN
RD-28	Primary	02/16/99	ND	---	Filtered	TN
RD-28	Primary	08/19/99	ND	---	Filtered	TN
RD-28	Primary	02/16/00	ND	---	Filtered	TR
RD-28	Primary	08/09/00	ND	---	Filtered	TR
RD-28	Primary	02/07/01	ND	---	Filtered	ES
RD-28	Primary	10/25/01	ND	---	Filtered	DL
RD-28	Primary	02/25/02	ND	---	Filtered	DL
RD-28	Primary	11/06/02	ND	---	Filtered	ES
RD-28	Primary	02/24/03	ND	---	Filtered	ES
RD-28	Primary	11/14/03	ND	---	Filtered	ES
RD-29	Primary	10/18/89	ND	---	Filtered	UST
RD-29	Primary	10/31/89	ND	---	Filtered	UST
RD-29	Primary	12/06/90	ND	---	Filtered	IT
RD-29	Duplicate	12/06/90	ND	---	Filtered	IT
RD-29	Primary	03/05/91	ND	---	Filtered	IT
RD-29	Primary	12/10/91	ND	---	Filtered	IT
RD-29	Split	12/10/91	ND	---	Filtered	CEP
RD-29	Primary	03/03/92	ND	---	Filtered	CEP
RD-29	Primary	03/05/93	ND	---	Filtered	CEP
RD-29	Primary	02/26/94	ND	---	Filtered	LAS
RD-29	Primary	05/09/01	ND	---	Filtered	ES
RD-29	Primary	05/03/02	ND	---	Filtered	DL
RD-29	Primary	05/13/03	ND	---	Filtered	ES
RD-30	Primary	10/19/89	ND	---	Filtered	UST
RD-30	Primary	06/29/90	ND	---	Filtered	UST
RD-30	Primary	12/06/90	ND	---	Filtered	IT
RD-30	Primary	03/09/91	ND	---	Filtered	IT

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BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-30	Primary	12/06/91	ND	---	Filtered	IT
RD-30	Primary	06/03/92	ND	---	Filtered	CEP
RD-30	Split	06/03/92	ND	---	Filtered	TEL
RD-30	Primary	03/21/93	ND	---	Filtered	CEP
RD-30	Primary	02/26/94	ND	---	Filtered	LAS
RD-30	Primary	08/09/94	ND	---	Filtered	LAS
RD-30	Primary	02/08/95	ND	---	Filtered	LAS
RD-30	Primary	08/19/95	ND	---	Filtered	LAS
RD-30	Primary	02/28/96	ND	---	Filtered	LAS
RD-30	Primary	08/20/96	ND	---	Filtered	LAS
RD-30	Primary	02/25/97	ND	---	Filtered	LAS
RD-30	Primary	08/27/97	ND	---	Filtered	LAS
RD-30	Primary	08/27/97	ND	---	Unfiltered	LAS
RD-30	Primary	05/28/98	ND	---	Filtered	TN
RD-30	Primary	08/05/98	ND	---	Filtered	TN
RD-30	Primary	02/05/99	ND	---	Filtered	TN
RD-30	Primary	05/05/00	ND	---	Filtered	TR
RD-30	Primary	08/08/00	ND	---	Filtered	TR
RD-30	Primary	05/09/01	ND	---	Filtered	ES
RD-30	Primary	11/09/01	ND	---	Filtered	DL
RD-30	Primary	03/11/02	ND	---	Filtered	DL
RD-30	Primary	08/30/02	ND	---	Filtered	ES
RD-30	Primary	02/07/03	ND	---	Filtered	ES
RD-30	Primary	11/14/03	ND	---	Filtered	ES
RD-31	Primary	10/24/89	ND	---	Unfiltered	UST
RD-31	Primary	12/05/90	ND	---	Filtered	IT
RD-31	Primary	03/10/91	ND	---	Filtered	IT
RD-31	Primary	03/05/92	ND	---	Filtered	CEP
RD-33A	Primary	12/05/91	ND	---	Filtered	IT
RD-33A	Primary	12/12/91	ND	---	Filtered	IT
RD-33A	Split	12/12/91	ND	---	Filtered	CEP
RD-33A	Primary	06/08/92	ND	---	Filtered	CEP
RD-33A	Primary	09/15/92	ND	---	Filtered	CEP
RD-33A	Primary	12/05/92	ND	---	Filtered	CEP
RD-33A	Primary	08/24/93	ND	---	Filtered	CEP
RD-33A	Primary	02/27/94	ND	---	Filtered	LAS
RD-33A	Primary	05/10/94	ND	---	Filtered	LAS
RD-33A	Primary	05/10/94	ND	---	Unfiltered	LAS
RD-33A	Primary	08/18/94	ND	---	Filtered	LAS
RD-33A	Primary	02/07/95	ND	---	Filtered	LAS
RD-33A	Primary	08/09/95	ND	---	Filtered	LAS
RD-33A	Primary	02/19/96	ND	---	Filtered	LAS
RD-33A	Primary	08/23/96	ND	---	Filtered	LAS
RD-33A	Primary	02/25/97	ND	---	Filtered	LAS
RD-33A	Primary	08/27/97	ND	---	Filtered	LAS
RD-33A	Primary	08/27/97	ND	---	Unfiltered	LAS
RD-33A	Primary	05/27/98	ND	---	Filtered	TN

See last page of Table E-III for footnotes and explanations.

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RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-33A	Primary	08/17/98	ND	---	Filtered	TN
RD-33A	Primary	02/03/99	ND	---	Filtered	TN
RD-33A	Primary	02/09/00	ND	---	Filtered	TR
RD-33A	Primary	05/14/01	ND	---	Filtered	ES
RD-33A	Primary	02/15/02	ND	---	Filtered	DL
RD-33A	Primary	01/30/03	ND	---	Filtered	ES
RD-33B	Primary	12/12/91	ND	---	Filtered	IT
RD-33B	Split	12/12/91	ND	---	Filtered	CEP
RD-33B	Primary	06/24/92	ND	---	Filtered	CEP
RD-33B	Primary	09/15/92	ND	---	Filtered	CEP
RD-33B	Primary	12/05/92	ND	---	Filtered	CEP
RD-33B	Primary	08/24/93	ND	---	Filtered	CEP
RD-33B	Primary	02/27/94	Cobalt-60	8.9 ± 2	Filtered	LAS
RD-33B	Primary	02/27/94	Cesium-137	21.6 ± 7.6	Filtered	LAS
RD-33B	Reanalysis of Primary	02/27/94	ND	---	Filtered	LAS
RD-33B	Primary	05/10/94	ND	---	Filtered	LAS
RD-33B	Primary	05/10/94	ND	---	Unfiltered	LAS
RD-33B	Primary	08/18/94	ND	---	Filtered	LAS
RD-33B	Primary	02/07/95	ND	---	Filtered	LAS
RD-33B	Primary	08/09/95	ND	---	Filtered	LAS
RD-33B	Primary	02/19/96	ND	---	Filtered	LAS
RD-33B	Primary	08/23/96	ND	---	Filtered	LAS
RD-33B	Primary	02/25/97	ND	---	Filtered	LAS
RD-33B	Primary	08/22/97	ND	---	Filtered	LAS
RD-33B	Primary	05/27/98	ND	---	Filtered	TN
RD-33B	Primary	08/17/98	ND	---	Filtered	TN
RD-33B	Primary	02/03/99	ND	---	Filtered	TN
RD-33B	Primary	02/09/00	ND	---	Filtered	TR
RD-33B	Primary	02/17/01	ND	---	Filtered	ES
RD-33B	Primary	02/15/02	ND	---	Filtered	DL
RD-33B	Primary	02/11/03	ND	---	Filtered	ES
RD-33C	Primary	12/05/91	ND	---	Filtered	IT
RD-33C	Primary	12/12/91	ND	---	Filtered	IT
RD-33C	Split	12/12/91	ND	---	Filtered	CEP
RD-33C	Primary	06/08/92	ND	---	Filtered	CEP
RD-33C	Primary	09/15/92	ND	---	Filtered	CEP
RD-33C	Primary	12/05/92	ND	---	Filtered	CEP
RD-33C	Primary	08/24/93	ND	---	Filtered	CEP
RD-33C	Primary	02/27/94	ND	---	Filtered	LAS
RD-33C	Primary	05/09/94	ND	---	Filtered	LAS
RD-33C	Primary	05/09/94	ND	---	Unfiltered	LAS
RD-33C	Primary	08/17/94	ND	---	Filtered	LAS
RD-33C	Primary	02/07/95	ND	---	Filtered	LAS
RD-33C	Primary	08/09/95	ND	---	Filtered	LAS
RD-33C	Primary	02/19/96	ND	---	Filtered	LAS
RD-33C	Primary	08/22/96	ND	---	Filtered	LAS
RD-33C	Primary	02/25/97	ND	---	Filtered	LAS

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RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-33C	Primary	08/21/97	ND	---	Filtered	LAS
RD-33C	Primary	05/27/98	ND	---	Filtered	TN
RD-33C	Primary	08/17/98	ND	---	Filtered	TN
RD-33C	Primary	02/03/99	ND	---	Filtered	TN
RD-33C	Primary	02/09/00	ND	---	Filtered	TR
RD-33C	Primary	02/17/01	ND	---	Filtered	ES
RD-33C	Primary	02/15/02	ND	---	Filtered	DL
RD-33C	Primary	02/10/03	ND	---	Filtered	ES
RD-34A	Primary	12/05/91	ND	---	Filtered	IT
RD-34A	Split	12/05/91	ND	---	Filtered	CEP
RD-34A	Primary	03/10/92	ND	---	Filtered	CEP
RD-34A	Split	03/10/92	ND	---	Filtered	TEL
RD-34A	Primary	06/08/92	ND	---	Filtered	CEP
RD-34A	Primary	09/13/92	ND	---	Filtered	CEP
RD-34A	Split	09/13/92	ND	<24	Filtered	BL
RD-34A	Primary	12/05/92	ND	---	Filtered	CEP
RD-34A	Split	12/05/92	ND	<2	Filtered	BL
RD-34A	Primary	03/09/93	ND	---	Filtered	CEP
RD-34A	Primary	08/24/93	ND	---	Filtered	CEP
RD-34A	Primary	11/18/93	ND	---	Filtered	LAS
RD-34A	Primary	02/26/94	Cobalt-60	14.6 ± 2.3	Filtered	LAS
RD-34A	Primary	02/26/94	Cesium-137	19 ± 7.3	Filtered	LAS
RD-34A	Reanalysis of primary	02/26/94	ND	---	Filtered	LAS
RD-34A	Primary	05/09/94	ND	---	Filtered	LAS
RD-34A	Primary	05/09/94	ND	---	Unfiltered	LAS
RD-34A	Primary	08/09/94	Cesium-137	9.2 ± 4.4	Filtered	LAS
RD-34A	Reanalysis of primary	08/09/94	ND	---	Filtered	LAS
RD-34A	Primary	02/07/95	ND	---	Filtered	LAS
RD-34A	Primary	08/09/95	ND	---	Filtered	LAS
RD-34A	Primary	02/19/96	ND	---	Filtered	LAS
RD-34A	Primary	08/18/96	ND	---	Filtered	LAS
RD-34A	Primary	02/07/97	ND	---	Filtered	LAS
RD-34A	Primary	05/27/98	ND	---	Filtered	TN
RD-34A	Primary	08/18/98	ND	---	Filtered	TN
RD-34A	Primary	05/09/01	ND	---	Filtered	ES
RD-34A	Primary	05/16/03	ND	---	Filtered	ES
RD-34B	Primary	12/05/91	ND	---	Filtered	IT
RD-34B	Primary	03/10/92	ND	---	Filtered	CEP
RD-34B	Split	03/10/92	ND	---	Filtered	TEL
RD-34B	Primary	06/08/92	ND	---	Filtered	CEP
RD-34B	Primary	09/13/92	ND	---	Filtered	CEP
RD-34B	Split	09/13/92	ND	<26	Filtered	BL
RD-34B	Primary	12/05/92	ND	---	Filtered	CEP
RD-34B	Primary	03/09/93	Cobalt-60	80 ± 17	Filtered	CEP
RD-34B	Reanalysis of primary	03/09/93	ND	---	Filtered	CEP
RD-34B	Primary	08/24/93	ND	---	Filtered	CEP
RD-34B	Primary	02/26/94	ND	---	Filtered	LAS

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-34B	Primary	05/10/94	ND	---	Filtered	LAS
RD-34B	Primary	05/10/94	ND	---	Unfiltered	LAS
RD-34B	Primary	08/09/94	ND	---	Filtered	LAS
RD-34B	Primary	02/07/95	ND	---	Filtered	LAS
RD-34B	Primary	08/09/95	ND	---	Filtered	LAS
RD-34B	Primary	02/19/96	ND	---	Filtered	LAS
RD-34B	Primary	08/18/96	ND	---	Filtered	LAS
RD-34B	Primary	02/07/97	ND	---	Filtered	LAS
RD-34B	Primary	08/21/97	ND	---	Filtered	LAS
RD-34B	Primary	05/27/98	ND	---	Filtered	TN
RD-34B	Primary	08/18/98	ND	---	Filtered	TN
RD-34B	Primary	02/04/99	ND	---	Filtered	TN
RD-34B	Primary	02/05/00	ND	---	Filtered	TR
RD-34B	Primary	02/16/01	ND	---	Filtered	ES
RD-34B	Primary	02/15/02	ND	---	Filtered	DL
RD-34B	Primary	02/06/03	ND	---	Filtered	ES
RD-34C	Primary	12/06/91	ND	---	Filtered	IT
RD-34C	Primary	03/10/92	ND	---	Filtered	CEP
RD-34C	Split	03/10/92	ND	---	Filtered	TEL
RD-34C	Primary	06/08/92	ND	---	Filtered	CEP
RD-34C	Primary	09/13/92	ND	---	Filtered	CEP
RD-34C	Split	09/13/92	ND	<29	Filtered	BL
RD-34C	Primary	12/05/92	ND	---	Filtered	CEP
RD-34C	Primary	03/09/93	ND	---	Filtered	CEP
RD-34C	Primary	08/24/93	ND	---	Filtered	CEP
RD-34C	Primary	02/26/94	ND	---	Filtered	LAS
RD-34C	Primary	05/09/94	ND	---	Filtered	LAS
RD-34C	Primary	05/09/94	ND	---	Unfiltered	LAS
RD-34C	Primary	08/09/94	ND	---	Filtered	LAS
RD-34C	Primary	02/07/95	ND	---	Filtered	LAS
RD-34C	Primary	08/10/95	ND	---	Filtered	LAS
RD-34C	Primary	02/19/96	ND	---	Filtered	LAS
RD-34C	Primary	08/19/96	ND	---	Filtered	LAS
RD-34C	Primary	02/07/97	ND	---	Filtered	LAS
RD-34C	Primary	08/21/97	ND	---	Filtered	LAS
RD-34C	Primary	05/27/98	ND	---	Filtered	TN
RD-34C	Primary	08/17/98	ND	---	Filtered	TN
RD-34C	Primary	02/04/99	ND	---	Filtered	TN
RD-34C	Primary	02/05/00	ND	---	Filtered	TR
RD-34C	Primary	02/16/01	ND	---	Filtered	ES
RD-34C	Primary	02/14/02	ND	---	Filtered	DL
RD-34C	Primary	02/06/03	ND	---	Filtered	ES
RD-35B	Primary	05/07/99	ND	---	Filtered	TN
RD-38B	Primary	02/17/99	ND	---	Filtered	TN
RD-44	Primary	08/24/97	ND	---	Filtered	LAS
RD-45C	Primary	10/06/94	ND	---	Filtered	LAS
RD-46B	Primary	02/15/99	ND	---	Filtered	TN

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RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-47	Primary	08/24/97	ND	---	Filtered	LAS
RD-50	Primary	05/05/94	ND	---	Filtered	LAS
RD-50	Primary	05/19/95	ND	---	Filtered	LAS
RD-50	Primary	05/14/96	ND	---	Filtered	LAS
RD-50	Primary	05/05/97	ND	---	Filtered	LAS
RD-50	Primary	05/28/98	ND	---	Filtered	TN
RD-51C	Primary	12/14/91	ND	---	Filtered	IT
RD-51C	Primary	03/06/92	ND	---	Filtered	CEP
RD-54A	Primary	09/12/93	ND	---	Filtered	CEP
RD-54A	Primary	09/29/93	ND	---	Filtered	CEP
RD-54A	Primary	05/08/94	ND	---	Filtered	LAS
RD-54A	Primary	08/09/94	ND	---	Filtered	LAS
RD-54A	Primary	08/03/95	ND	---	Filtered	LAS
RD-54A	Primary	05/16/96	ND	---	Filtered	LAS
RD-54A	Primary	08/23/96	ND	---	Filtered	LAS
RD-54A	Primary	05/05/97	ND	---	Filtered	LAS
RD-54A	Primary	08/22/97	ND	---	Filtered	LAS
RD-54A	Primary	02/08/98	ND	---	Filtered	TN
RD-54A	Primary	08/07/98	ND	---	Filtered	TN
RD-54A	Primary	02/08/99	ND	---	Filtered	TN
RD-54A	Primary	03/15/00	ND	---	Filtered	TR
RD-54A	Primary	10/26/01	ND	---	Filtered	DL
RD-54A	Primary	02/27/02	ND	---	Filtered	DL
RD-54A	Primary	02/18/03	ND	---	Filtered	ES
RD-54B	Primary	09/12/93	ND	---	Filtered	CEP
RD-54B	Primary	09/29/93	ND	---	Filtered	CEP
RD-54B	Primary	05/08/94	ND	---	Filtered	LAS
RD-54B	Primary	08/08/94	ND	---	Filtered	LAS
RD-54B	Primary	08/30/95	ND	---	Filtered	LAS
RD-54B	Primary	05/14/96	ND	---	Filtered	LAS
RD-54B	Primary	08/23/96	ND	---	Filtered	LAS
RD-54B	Primary	08/22/97	ND	---	Filtered	LAS
RD-54B	Primary	02/08/98	ND	---	Filtered	TN
RD-54B	Primary	08/07/98	ND	---	Filtered	TN
RD-54B	Primary	02/08/99	ND	---	Filtered	TN
RD-54B	Primary	03/15/00	ND	---	Filtered	TR
RD-54B	Primary	10/25/01	ND	---	Filtered	DL
RD-54B	Primary	02/27/02	ND	---	Filtered	DL
RD-54B	Primary	02/26/03	ND	---	Filtered	ES
RD-54C	Primary	09/11/93	ND	---	Filtered	CEP
RD-54C	Primary	09/29/93	ND	---	Filtered	CEP
RD-54C	Primary	05/08/94	ND	---	Filtered	LAS
RD-54C	Primary	08/08/94	ND	---	Filtered	LAS
RD-54C	Primary	08/30/95	ND	---	Filtered	LAS
RD-54C	Primary	05/16/96	ND	---	Filtered	LAS
RD-54C	Primary	08/23/96	ND	---	Filtered	LAS
RD-54C	Primary	05/05/97	ND	---	Filtered	LAS

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 RADIONUCLIDES IN GROUNDWATER SAMPLES
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-54C	Primary	08/24/97	ND	---	Filtered	LAS
RD-54C	Primary	02/08/98	ND	---	Filtered	TN
RD-54C	Primary	08/07/98	ND	---	Filtered	TN
RD-54C	Primary	02/09/99	ND	---	Filtered	TN
RD-54C	Primary	03/15/00	ND	---	Filtered	TR
RD-54C	Primary	11/02/01	ND	---	Filtered	DL
RD-54C	Primary	02/27/02	ND	---	Filtered	DL
RD-54C	Primary	02/26/03	ND	---	Filtered	ES
RD-56A	Primary	05/10/94	ND	---	Filtered	LAS
RD-56A	Primary	05/28/98	ND	---	Filtered	TN
RD-56B	Primary	05/28/98	ND	---	Filtered	TN
RD-57	Primary	03/16/94	ND	---	Filtered	LAS
RD-57	Primary	05/10/94	ND	---	Filtered	LAS
RD-57	Primary	08/18/94	ND	---	Filtered	LAS
RD-57	Primary	02/07/95	ND	---	Filtered	LAS
RD-57	Primary	08/09/95	ND	---	Filtered	LAS
RD-57	Primary	02/19/96	ND	---	Filtered	LAS
RD-57	Primary	08/22/96	ND	---	Filtered	LAS
RD-57	Primary	02/25/97	ND	---	Filtered	LAS
RD-57	Primary	08/27/97	ND	---	Filtered	LAS
RD-57	Primary	08/27/97	ND	---	Unfiltered	LAS
RD-57	Primary	05/26/98	ND	---	Filtered	TN
RD-57	Primary	08/17/98	ND	---	Filtered	TN
RD-57	Primary	05/13/99	ND	---	Filtered	TN
RD-57	Primary	02/09/00	ND	---	Filtered	TR
RD-57	Primary	05/11/01	ND	---	Filtered	ES
RD-57	Primary	02/14/02	ND	---	Filtered	DL
RD-57	Primary	01/29/03	ND	---	Filtered	ES
RD-57	Primary	04/30/03	ND	---	Filtered	ES
RD-59A	Primary	08/16/94	ND	---	Filtered	LAS
RD-59A	Primary	02/06/95	ND	---	Filtered	LAS
RD-59A	Duplicate	02/06/95	ND	---	Filtered	LAS
RD-59A	Primary	08/08/95	ND	---	Filtered	LAS
RD-59A	Primary	03/12/96	ND	---	Filtered	LAS
RD-59A	Primary	08/21/96	ND	---	Filtered	LAS
RD-59A	Primary	02/16/97	ND	---	Filtered	LAS
RD-59A	Primary	08/22/97	ND	---	Filtered	LAS
RD-59A	Primary	08/19/98	ND	---	Filtered	TN
RD-59A	Primary	02/16/99	ND	---	Filtered	TN
RD-59A	Primary	03/14/00	ND	---	Filtered	TR
RD-59A	Primary	05/16/01	ND	---	Filtered	ES
RD-59A	Primary	02/28/02	ND	---	Filtered	DL
RD-59A	Primary	01/31/03	ND	---	Filtered	ES
RD-59A	Primary	05/15/03	ND	---	Filtered	ES
RD-59A	Split	05/15/03	ND	---	Filtered	ES
RD-59B	Primary	08/16/94	ND	---	Filtered	LAS
RD-59B	Primary	02/06/95	ND	---	Filtered	LAS

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
RD-59B	Primary	08/08/95	ND	---	Filtered	LAS
RD-59B	Primary	03/12/96	ND	---	Filtered	LAS
RD-59B	Primary	08/21/96	ND	---	Filtered	LAS
RD-59B	Primary	02/16/97	ND	---	Filtered	LAS
RD-59B	Primary	08/22/97	ND	---	Filtered	LAS
RD-59B	Primary	08/19/98	ND	---	Filtered	TN
RD-59B	Primary	02/16/99	ND	---	Filtered	TN
RD-59B	Primary	03/14/00	ND	---	Filtered	TR
RD-59B	Primary	02/17/01	ND	---	Filtered	ES
RD-59B	Primary	02/28/02	ND	---	Filtered	DL
RD-59B	Primary	01/31/03	ND	---	Filtered	ES
RD-59C	Primary	08/16/94	ND	---	Filtered	LAS
RD-59C	Primary	02/06/95	ND	---	Filtered	LAS
RD-59C	Primary	08/08/95	ND	---	Filtered	LAS
RD-59C	Primary	03/12/96	ND	---	Filtered	LAS
RD-59C	Primary	08/21/96	ND	---	Filtered	LAS
RD-59C	Primary	02/16/97	ND	---	Filtered	LAS
RD-59C	Primary	08/22/97	ND	---	Filtered	LAS
RD-59C	Primary	08/19/98	ND	---	Filtered	TN
RD-59C	Primary	02/16/99	ND	---	Filtered	TN
RD-59C	Primary	03/14/00	ND	---	Filtered	TR
RD-59C	Primary	02/17/01	ND	---	Filtered	ES
RD-59C	Primary	02/28/02	ND	---	Filtered	DL
RD-59C	Primary	01/31/03	ND	---	Filtered	ES
RD-61	Primary	05/28/98	ND	---	Filtered	TN
RD-63	Primary	01/04/95	ND	---	Filtered	LAS
RD-63	Primary	02/02/99	ND	---	Filtered	TN
RD-63	Primary	02/16/00	ND	---	Filtered	TR
RD-63	Primary	02/23/01	ND	---	Filtered	ES
RD-63	Primary	02/14/02	ND	---	Filtered	DL
RD-63	Primary	02/05/03	ND	---	Filtered	ES
RD-64	Primary	05/10/01	ND	---	Filtered	ES
RD-64	Primary	02/28/02	ND	---	Filtered	DL
RD-64	Primary	01/29/03	ND	---	Filtered	ES
RD-69	Primary	05/28/98	ND	---	Filtered	TN
RD-74	Primary	05/13/99	ND	---	Filtered	TN
WS-04A	Primary	12/05/90	ND	---	Filtered	IT
WS-07	Primary	12/06/90	ND	---	Filtered	IT
WS-07	Duplicate	12/06/90	ND	---	Filtered	IT
WS-07	Primary	03/08/91	ND	---	Filtered	IT
WS-07	Primary	12/07/91	ND	---	Filtered	IT
WS-07	Split	12/07/91	ND	---	Filtered	CEP
WS-07	Primary	03/25/92	ND	---	Filtered	CEP
WS-13	Primary	10/17/89	ND	---	Filtered	UST
WS-13	Duplicate	10/17/89	ND	---	Filtered	UST
WS-13	Primary	11/01/89	ND	---	Unfiltered	UST

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RADIONUCLIDES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
Off-Site Private Wells and Springs						
OS-01	Primary	12/11/90	ND	---	Filtered	IT
OS-01	Primary	03/09/91	ND	---	Filtered	IT
OS-01	Primary	12/09/91	ND	---	Filtered	IT
OS-01	Primary	06/09/92	ND	---	Filtered	CEP
OS-01	Primary	09/15/92	ND	---	Filtered	CEP
OS-01	Primary	12/17/92	ND	---	Filtered	CEP
OS-01	Primary	08/23/93	ND	---	Filtered	CEP
OS-01	Primary	02/23/94	ND	---	Filtered	LAS
OS-01	Primary	08/15/94	ND	---	Filtered	LAS
OS-02	Primary	12/11/90	ND	---	Filtered	IT
OS-02	Primary	03/08/91	ND	---	Filtered	IT
OS-02	Duplicate	03/08/91	ND	---	Filtered	IT
OS-02	Primary	12/09/91	ND	---	Filtered	IT
OS-02	Primary	06/09/92	ND	---	Filtered	CEP
OS-02	Primary	09/15/92	ND	---	Filtered	CEP
OS-02	Primary	12/17/92	ND	---	Filtered	CEP
OS-02	Primary	08/23/93	ND	---	Filtered	CEP
OS-02	Primary	02/23/94	ND	---	Filtered	LAS
OS-02	Primary	08/15/94	ND	---	Filtered	LAS
OS-03	Primary	12/11/90	ND	---	Filtered	IT
OS-03	Primary	03/08/91	ND	---	Filtered	IT
OS-03	Primary	12/09/91	ND	---	Filtered	IT
OS-03	Primary	06/09/92	ND	---	Filtered	CEP
OS-03	Primary	08/23/93	ND	---	Filtered	CEP
OS-03	Primary	02/23/94	ND	---	Filtered	LAS
OS-03	Primary	08/15/94	ND	---	Filtered	LAS
OS-04	Primary	12/11/90	ND	---	Filtered	IT
OS-04	Primary	06/09/92	ND	---	Filtered	CEP
OS-04	Primary	06/22/93	ND	---	Filtered	CEP
OS-04	Primary	08/23/93	ND	---	Filtered	CEP
OS-04	Primary	02/23/94	ND	---	Filtered	LAS
OS-04	Primary	08/15/94	ND	---	Filtered	LAS
OS-05	Primary	12/11/90	ND	---	Filtered	IT
OS-05	Primary	03/08/91	ND	---	Filtered	IT
OS-05	Primary	12/09/91	ND	---	Filtered	IT
OS-05	Primary	06/09/92	ND	---	Filtered	CEP
OS-05	Primary	09/15/92	ND	---	Filtered	CEP
OS-05	Split	09/15/92	ND	<32	Filtered	BL
OS-05	Primary	12/17/92	ND	---	Filtered	CEP
OS-05	Primary	08/23/93	ND	---	Filtered	CEP
OS-05	Primary	02/23/94	ND	---	Filtered	LAS
OS-08	Primary	06/09/92	ND	---	Filtered	CEP
OS-08	Primary	08/15/94	ND	---	Filtered	LAS
OS-10	Primary	12/09/91	ND	---	Filtered	IT
OS-10	Primary	08/05/94	ND	---	Filtered	LAS
OS-15	Primary	12/10/91	ND	---	Filtered	IT

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TABLE E-III

RESULTS OF ANALYSES FOR MAN-MADE*, GAMMA-EMITTING
 RADIONUCLIDES IN GROUNDWATER SAMPLES
 BOEING SANTA SUSANA FIELD LABORATORY
 VENTURA COUNTY, CALIFORNIA

Well Identifier	Sample Type	Date Sampled	Radionuclide(s) Detected	Concentration (picoCuries per liter)	Sample Handling	Lab
OS-16	Primary	11/01/89	ND	---	Unfiltered	UST
OS-16	Primary	11/01/89	ND	---	Filtered	UST
OS-16	Duplicate	11/01/89	ND	---	Unfiltered	UST
OS-16	Duplicate	11/01/89	ND	---	Filtered	UST
OS-16	Primary	12/10/91	ND	---	Filtered	IT
OS-16	Primary	03/12/92	ND	---	Filtered	CEP
OS-17	Primary	12/09/91	ND	---	Filtered	IT
OS-17	Primary	03/12/92	ND	---	Filtered	CEP
OS-21	Primary	11/01/89	ND	---	Unfiltered	UST
OS-21	Primary	11/01/89	ND	---	Filtered	UST
OS-21	Primary	03/09/91	ND	---	Filtered	IT
OS-21	Primary	12/10/91	ND	---	Filtered	IT
OS-21	Primary	03/12/92	ND	---	Filtered	CEP
OS-21	Primary	03/19/93	ND	---	Filtered	CEP
Calleguas	Primary	12/14/90	ND	---	Filtered	IT
Calleguas	Primary	03/10/91	ND	---	Filtered	IT
Calleguas	Primary	03/12/92	ND	---	Filtered	CEP

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TABLE E-III
FOOTNOTES AND EXPLANATIONS

(*)	=	Man-made gamma-emitting radionuclides include cobalt-57, cobalt-60, cesium-134 and cesium-137.
ND	=	No gamma-emitting radionuclides detected above minimum detectable activities.
(---)	=	See ND.
BL	=	Barringer Laboratories, Inc., Golden, Colorado.
CEP	=	Controls for Environmental Pollution, Santa Fe, New Mexico.
DL	=	Davi Laboratories, Pinole, California.
ES	=	Eberline Services (formerly Thermo Retec), Richmond, California.
IT	=	International Technologies Analytical Services (formerly UST), Richland, Washington.
LAS	=	LAS Laboratories, Inc. (formerly Lockheed Martin), Las Vegas, Nevada.
STL	=	Severn Trent Laboratories, Richland, Washington.
TEL	=	Teledyne Isotopes, Westwood, New Jersey.
TMA	=	Thermoanalytical, Inc. (TMA/NORCAL), Richmond, California.
TN	=	Thermo NUtech, Richmond, California.
TR	=	Thermo Retec (formerly Thermo NUtech), Richmond, California.
UST	=	United States Testing Laboratory, Richland, Washington.
Primary	=	Primary sample
Duplicate	=	Sample duplicate
Split	=	Sample split

NOTE: Samples analyzed for gamma-emitting radionuclides by EPA Method 901.1

TABLE E-IV

RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
<i>Shallow Wells</i>						
SH-04	Primary	03/18/93	Radium-226	3.3 ± 2.6	Filtered	CEP
SH-04	Primary	03/18/93	Radium-228	<1	Filtered	CEP
SH-04	Primary	06/09/93	Radium-226	3.1 ± 1.0	Filtered	CEP
SH-04	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
SH-04	Primary	11/04/93	Radium-226	0.14 ± 0.12	Filtered	LAS
SH-04	Primary	05/06/94	Uranium-233/234	4.54 ± 0.79	Filtered	LAS
SH-04	Primary	05/06/94	Uranium-235	0.43 ± 0.24	Filtered	LAS
SH-04	Primary	05/06/94	Uranium-238	3.73 ± 0.71	Filtered	LAS
SH-11	Primary	10/31/89	Uranium-234	3.91 ± 0.702	Unfiltered	CEP
SH-11	Primary	10/31/89	Uranium-234	3.29 ± 0.577	Filtered	UST
SH-11	Primary	10/31/89	Uranium-235	0.144 ± 0.127	Unfiltered	UST
SH-11	Primary	10/31/89	Uranium-235	0.0843 ± 0.0848	Filtered	UST
SH-11	Primary	10/31/89	Uranium-238	2.94 ± 0.608	Unfiltered	UST
SH-11	Primary	10/31/89	Uranium-238	3.42 ± 0.585	Filtered	UST
SH-11	Primary	10/31/89	Radium-226	0.425 ± 0.120	Unfiltered	UST
SH-11	Primary	10/31/89	Radium-226	0.254 ± 0.0976	Filtered	UST
SH-11	Primary	10/31/89	Radium-228	1.23 ± 0.493	Unfiltered	UST
SH-11	Primary	10/31/89	Radium-228	0.842 ± 0.405	Filtered	UST
SH-11	Primary	10/31/89	Thorium-228	0.575 ± 0.333	Unfiltered	UST
SH-11	Primary	10/31/89	Thorium-228	-0.0205 ± 0.0239	Filtered	UST
SH-11	Primary	10/31/89	Thorium-230	0.284 ± 0.137	Unfiltered	UST
SH-11	Primary	10/31/89	Thorium-230	0.00785 ± 0.00789	Filtered	UST
SH-11	Primary	10/31/89	Thorium-232	0.583 ± 0.201	Unfiltered	UST
SH-11	Primary	10/31/89	Thorium-232	0.00981 ± 0.0104	Filtered	UST
RS-05	Primary	10/31/89	Uranium-234	5.73 ± 0.988	Unfiltered	UST
RS-05	Primary	10/31/89	Uranium-234	5.81 ± 0.830	Filtered	UST
RS-05	Primary	10/31/89	Uranium-235	0.241 ± 0.202	Unfiltered	UST
RS-05	Primary	10/31/89	Uranium-235	0.0883 ± 0.0823	Filtered	UST
RS-05	Primary	10/31/89	Uranium-238	5.83 ± 0.991	Unfiltered	UST
RS-05	Primary	10/31/89	Uranium-238	5.04 ± 0.741	Filtered	UST
RS-05	Primary	10/31/89	Radium-226	0.359 ± 0.124	Unfiltered	UST
RS-05	Primary	10/31/89	Radium-226	-0.00350 ± 0.0459	Filtered	UST
RS-05	Primary	10/31/89	Radium-228	2.19 ± 0.657	Unfiltered	UST

See last page of Table E-IV for footnotes and explanations.

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TABLE E-IV
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RS-05	Primary	10/31/89	Radium-228	1.16 ± 0.487	Filtered	UST
RS-05	Primary	10/31/89	Thorium-228	1.20 ± 0.463	Unfiltered	UST
RS-05	Primary	10/31/89	Thorium-228	0.0345 ± 0.0346	Filtered	UST
RS-05	Primary	10/31/89	Thorium-230	0.917 ± 0.309	Unfiltered	UST
RS-05	Primary	10/31/89	Thorium-230	0.00827 ± 0.0117	Filtered	UST
RS-05	Primary	10/31/89	Thorium-232	1.68 ± 0.440	Unfiltered	UST
RS-05	Primary	10/31/89	Thorium-232	0.0393 ± 0.0202	Filtered	UST
RS-08	Primary	03/18/93	Radium-226	3 ± 2.3	Filtered	CEP
RS-08	Primary	03/18/93	Radium-228	<1	Filtered	CEP
RS-08	Primary	06/08/93	Radium-226	2.4 ± 1.0	Filtered	CEP
RS-08	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
RS-08	Primary	11/08/93	Radium-226	0.09 ± 0.13	Filtered	CEP
RS-08	Primary	11/08/93	Uranium-233/234 (dissolved)	15.0 ± 2.0	Filtered	LAS
RS-08	Primary	11/08/93	Uranium-235 (dissolved)	0.62 ± 0.32	Filtered	LAS
RS-08	Primary	11/08/93	Uranium-238 (dissolved)	14.6 ± 1.9	Filtered	LAS
RS-18	Primary	03/04/92	Uranium-234	2.75 ± 0.62	Unfiltered	CEP
RS-18	Primary	03/04/92	Uranium-235	<0.6	Unfiltered	CEP
RS-18	Primary	03/04/92	Uranium-238	3.60 ± 0.70	Unfiltered	CEP
RS-18	Primary	09/10/92	Radium-226	3.5 ± 2.0	Filtered	CEP
RS-18	Primary	09/10/92	Radium-228	<1	Filtered	CEP
RS-18	Primary	09/10/92	Uranium-234	36.6 ± 6.0	Unfiltered	CEP
RS-18	Primary	09/10/92	Uranium-235	1.80 ± 0.90	Unfiltered	CEP
RS-18	Primary	09/10/92	Uranium-238	41.9 ± 6.6	Unfiltered	CEP
RS-18	Primary	12/15/92	Uranium-234	5.17 ± 0.69	Unfiltered	CEP
RS-18	Primary	12/15/92	Uranium-235	<0.6	Unfiltered	CEP
RS-18	Primary	12/15/92	Uranium-238	5.67 ± 0.77	Unfiltered	CEP
RS-18	Primary	12/15/92	Thorium-228	<0.6	Filtered	CEP
RS-18	Primary	12/15/92	Thorium-230	<0.6	Filtered	CEP
RS-18	Primary	12/15/92	Thorium-232	<0.6	Filtered	CEP
RS-18	Primary	06/23/93	Uranium-234	1.8 ± 3	Filtered	CEP
RS-18	Primary	06/23/93	Uranium-235	0.1 ± 0.1	Filtered	CEP
RS-18	Primary	06/23/93	Uranium-236	2.1 ± 0.4	Filtered	CEP
RS-18	Primary	06/23/93	Thorium-228	0.00 ± 0.05	Filtered	CEP
RS-18	Primary	06/23/93	Thorium-230	0.00 ± 0.05	Filtered	CEP

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TABLE E-IV
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RS-18	Primary	06/23/93	Thorium-232	0.00 ± 0.05	Filtered	CEP
RS-18	Primary	11/06/93	Uranium-233/234	16.3 ± 2.2	Filtered	LAS
RS-18	Primary	11/06/93	Uranium-235	0.42 ± 0.27	Filtered	LAS
RS-18	Primary	11/06/93	Uranium-238	14.6 ± 2.0	Filtered	LAS
RS-18	Primary	11/06/93	Thorium-228	0.20 ± 0.27	Filtered	LAS
RS-18	Primary	11/06/93	Thorium-230	0.53 ± 0.30	Filtered	LAS
RS-18	Primary	11/06/93	Thorium-232	0.19 ± 0.18	Filtered	LAS
RS-18	Primary	05/04/94	Uranium-233/234	19.9 ± 1.8	Filtered	LAS
RS-18	Primary	05/04/94	Uranium-235	0.9 ± 0.33	Filtered	LAS
RS-18	Primary	05/04/94	Uranium-238	19.2 ± 1.8	Filtered	LAS
RS-18	Primary	05/04/94	Thorium-228	-0.014 ± 0.058	Filtered	LAS
RS-18	Primary	05/04/94	Thorium-230	0.103 ± 0.058	Filtered	LAS
RS-18	Primary	05/04/94	Thorium-232	0.056 ± 0.025	Filtered	LAS
RS-18	Primary	02/17/95	Uranium-233/234	8.98 ± 0.96	Filtered	LAS
RS-18	Primary	02/17/95	Uranium-235	0.49 ± 0.21	Filtered	LAS
RS-18	Primary	02/17/95	Uranium-238	7.67 ± 0.87	Filtered	LAS
RS-18	Primary	02/17/95	Thorium-228	-0.05 ± 0.18	Filtered	LAS
RS-18	Primary	02/17/95	Thorium-230	0.24 ± 0.16	Filtered	LAS
RS-18	Primary	02/17/95	Thorium-232	0.057 ± 0.079	Filtered	LAS
RS-18	Primary	08/10/95	Uranium-233/234	15.00 ± 0.92	Filtered	LAS
RS-18	Primary	08/10/95	Uranium-235	0.78 ± 0.13	Filtered	LAS
RS-18	Primary	08/10/95	Uranium-238	15.19 ± 0.93	Filtered	LAS
RS-18	Primary	08/10/95	Thorium-228	-0.05 ± 0.28	Filtered	LAS
RS-18	Primary	08/10/95	Thorium-230	-0.022 ± 0.076	Filtered	LAS
RS-18	Primary	08/10/95	Thorium-232	0.037 ± 0.095	Filtered	LAS
RS-18	Primary	05/16/96	Uranium-233/234	11.5 ± 1.1	Filtered	LAS
RS-18	Primary	05/16/96	Uranium-235	0.89 ± 0.28	Filtered	LAS
RS-18	Primary	05/16/96	Uranium-238	10.8 ± 1.1	Filtered	LAS
RS-18	Primary	05/16/96	Thorium-228	-0.07 ± 0.17	Filtered	LAS
RS-18	Primary	05/16/96	Thorium-230	-0.027 ± 0.048	Filtered	LAS
RS-18	Primary	05/16/96	Thorium-232	0.013 ± 0.070	Filtered	LAS
RS-18	Primary	02/03/97	Uranium-233/234	14.2 ± 1.3	Filtered	LAS
RS-18	Primary	02/03/97	Uranium-235	0.53 ± 0.21	Filtered	LAS
RS-18	Primary	02/03/97	Uranium-238	13.9 ± 1.3	Filtered	LAS

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TABLE E-IV
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RS-18	Primary	02/03/97	Thorium-228	0.1 ± 0.17	Filtered	LAS
RS-18	Primary	02/03/97	Thorium-230	0.009 ± 0.043	Filtered	LAS
RS-18	Primary	02/03/97	Thorium-232	-0.009 ± 0.034	Filtered	LAS
RS-18	Primary	02/05/98	Uranium-233/234	14.2 ± 0.94	Filtered	TN
RS-18	Primary	02/05/98	Uranium-235	0.943 ± 0.17	Filtered	TN
RS-18	Primary	02/05/98	Uranium-238	12.9 ± 0.88	Filtered	TN
RS-18	Primary	02/05/98	Thorium-228	-0.009 ± 0.023	Filtered	TN
RS-18	Primary	02/05/98	Thorium-230	<0.138	Filtered	TN
RS-18	Primary	02/05/98	Thorium-232	0 ± 0.012	Filtered	TN
RS-18	Primary	08/05/98	Thorium-228	0.014 ± 0.019	Filtered	TN
RS-18	Primary	08/05/98	Thorium-230	<0.080	Filtered	TN
RS-18	Primary	08/05/98	Thorium-232	0.005 ± 0.019	Filtered	TN
RS-18	Primary	08/05/98	Uranium-233/234	13.7 ± 0.72	Filtered	TN
RS-18	Primary	08/05/98	Uranium-235	0.793 ± 0.13	Filtered	TN
RS-18	Primary	08/05/98	Uranium-238	13.3 ± 0.71	Filtered	TN
RS-18	Primary	05/09/00	Thorium-228	<0.166	Filtered	TR
RS-18	Primary	05/09/00	Thorium-230	<0.219	Filtered	TR
RS-18	Primary	05/09/00	Thorium-232	0.037 ± 0.050	Filtered	TR
RS-18	Primary	05/09/00	Uranium-233/234	15.1 ± 0.97	Filtered	TR
RS-18	Primary	05/09/00	Uranium-235	0.795 ± 0.19	Filtered	TR
RS-18	Primary	05/09/00	Uranium-238	13.2 ± 0.89	Filtered	TR
RS-18	Primary	02/19/01	Thorium-228	0.04 ± 0.081	Filtered	ES
RS-18	Primary	02/19/01	Thorium-230	0.00 ± 0.069	Filtered	ES
RS-18	Primary	02/19/01	Thorium-232	0.00 ± 0.035	Filtered	ES
RS-18	Primary	02/19/01	Uranium-233/234	8.4 ± 0.38	Filtered	ES
RS-18	Primary	02/19/01	Uranium-235	0.442 ± 0.072	Filtered	ES
RS-18	Primary	02/19/01	Uranium-238	7.89 ± 0.36	Filtered	ES
RS-18	Primary	05/02/03	Thorium-228	-0.009U ± 0.037	Filtered	ES
RS-18	Primary	05/02/03	Thorium-230	0.018U ± 0.046	Filtered	ES
RS-18	Primary	05/02/03	Thorium-232	0.005U ± 0.009	Filtered	ES
RS-18	Primary	05/02/03	Uranium-233/234	20.3 ± 1.2	Filtered	ES
RS-18	Primary	05/02/03	Uranium-235	1.05 ± 0.12	Filtered	ES
RS-18	Primary	05/02/03	Uranium-238	19.3 ± 1.1	Filtered	ES

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TABLE E-IV
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RS-25	Primary	02/25/03	Uranium-233/234	1.98 ± 0.16	Filtered	ES
RS-25	Primary	02/25/03	Uranium-235	0.090 ± 0.035	Filtered	ES
RS-25	Primary	02/25/03	Uranium-238	2.02 ± 0.16	Filtered	ES
RS-28	Primary	11/01/89	Uranium-234	4.59 ± 0.181	Filtered	UST
RS-28	Primary	11/01/89	Uranium-235	0.153 ± 0.0139	Filtered	UST
RS-28	Primary	11/01/89	Uranium-238	4.24 ± 0.147	Filtered	UST
RS-28	Primary	11/01/89	Radium-226	0.105 ± 0.0854	Unfiltered	UST
RS-28	Primary	11/01/89	Radium-226	0.0296 ± 0.0596	Filtered	UST
RS-28	Primary	11/01/89	Radium-228	0.726 ± 0.669	Unfiltered	UST
RS-28	Primary	11/01/89	Radium-228	0.686 ± 0.540	Filtered	UST
RS-28	Primary	11/01/89	Thorium-228	0.586 ± 0.0930	Unfiltered	UST
RS-28	Primary	11/01/89	Thorium-228	0.0222 ± 0.0283	Filtered	UST
RS-28	Primary	11/01/89	Thorium-230	0.147 ± 0.0377	Unfiltered	UST
RS-28	Primary	11/01/89	Thorium-230	0.00580 ± 0.0102	Filtered	UST
RS-28	Primary	11/01/89	Thorium-232	0.662 ± 0.0961	Unfiltered	UST
RS-28	Primary	11/01/89	Thorium-232	0.00193 ± 0.00387	Filtered	UST
RS-54	Primary	05/07/94	Uranium-233/234	26.4 ± 2.4	Filtered	LAS
RS-54	Primary	05/07/94	Uranium-235	2.15 ± 0.59	Filtered	LAS
RS-54	Primary	05/07/94	Uranium-238	26.5 ± 2.4	Filtered	LAS
RS-54	Primary	08/03/97	Uranium-233/234	16.4 ± 1.2	Filtered	LAS
RS-54	Primary	08/03/97	Uranium-235	0.69 ± 0.19	Filtered	LAS
RS-54	Primary	08/03/97	Uranium-238	14.8 ± 1.2	Filtered	LAS
RS-54	Primary	08/27/97	Uranium-233/234	15.9 ± 1.2	Filtered	LAS
RS-54	Primary	08/27/97	Uranium-235	0.84 ± 0.19	Filtered	LAS
RS-54	Primary	08/27/97	Uranium-238	14.5 ± 1.1	Filtered	LAS
RS-54	Primary	08/27/97	Uranium-233/234	16.6 ± 1.2	Unfiltered	LAS
RS-54	Primary	08/27/97	Uranium-235	0.75 ± 0.20	Unfiltered	LAS
RS-54	Primary	08/27/97	Uranium-238	15.6 ± 1.2	Unfiltered	LAS
RS-54	Primary	02/08/98	Uranium-233/234	8.75 ± 0.39	Filtered	TN
RS-54	Primary	02/08/98	Uranium-235	0.478 ± 0.072	Filtered	TN
RS-54	Primary	02/08/98	Uranium-238	7.90 ± 0.36	Filtered	TN
RS-54	Primary	02/08/98	Thorium-228	-0.011 ± 0.028	Filtered	TN
RS-54	Primary	02/08/98	Thorium-230	0.039 ± 0.044	Filtered	TN
RS-54	Primary	02/08/98	Thorium-232	0.006 ± 0.011	Filtered	TN

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RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RS-54	Primary	08/04/98	Thorium-228	0.028 ± 0.028	Filtered	TN
RS-54	Primary	08/04/98	Thorium-230	<0.081	Filtered	TN
RS-54	Primary	08/04/98	Thorium-232	0.018 ± 0.028	Filtered	TN
RS-54	Primary	08/04/98	Uranium-233/234	7.91 ± 0.48	Filtered	TN
RS-54	Primary	08/04/98	Uranium-235	0.509 ± 0.098	Filtered	TN
RS-54	Primary	08/04/98	Uranium-238	7.24 ± 0.45	Filtered	TN
RS-54	Primary	02/02/99	Thorium-228	0.012 ± 0.020	Filtered	TN
RS-54	Primary	02/02/99	Thorium-230	0.034 ± 0.040	Filtered	TN
RS-54	Primary	02/02/99	Thorium-232	-0.002 ± 0.008	Filtered	TN
RS-54	Primary	02/02/99	Uranium-233/234	11.7 ± 0.75	Filtered	TN
RS-54	Primary	02/02/99	Uranium-235	0.745 ± 0.15	Filtered	TN
RS-54	Primary	02/02/99	Uranium-238	10.7 ± 0.70	Filtered	TN
RS-54	Primary	08/18/99	Thorium-228	0.030 ± 0.12	Filtered	TN
RS-54	Primary	08/18/99	Thorium-230	0.112 ± 0.12	Filtered	TN
RS-54	Primary	08/18/99	Thorium-232	0 ± 0.041	Filtered	TN
RS-54	Primary	08/18/99	Uranium-233/234	15.7 ± 1.1	Filtered	TN
RS-54	Primary	08/18/99	Uranium-235	1.23 ± 0.25	Filtered	TN
RS-54	Primary	08/18/99	Uranium-238	14.0 ± 1.0	Filtered	TN
RS-54	Primary	03/15/00	Thorium-228	0 ± 0.091	Filtered	TR
RS-54	Primary	03/15/00	Thorium-230	1.28 ± 0.31 B	Filtered	TR
RS-54	Primary	03/15/00	Thorium-232	0.060 ± 0.091	Filtered	TR
RS-54	Primary	03/15/00	Uranium-233/234	9.08 ± 0.90	Filtered	TR
RS-54	Primary	03/15/00	Uranium-235	0.486 ± 0.20	Filtered	TR
RS-54	Primary	03/15/00	Uranium-238	8.77 ± 0.87 B	Filtered	TR
RS-54	Primary	11/01/01	Thorium-228	0.00 ± 1.00	Filtered	DL
RS-54	Primary	11/01/01	Thorium-230	0.00 ± 1.00	Filtered	DL
RS-54	Primary	11/01/01	Thorium-232	0.00 ± 1.00	Filtered	DL
RS-54	Primary	11/01/01	Uranium-233/234	20.59 ± 0.39	Filtered	DL
RS-54	Primary	11/01/01	Uranium-235	0.72 ± 0.07	Filtered	DL
RS-54	Primary	11/01/01	Uranium-238	14.80 ± 0.33	Filtered	DL
RS-54	Primary	03/01/02	Thorium-228	0.43 ± 1.00	Filtered	DL
RS-54	Primary	03/01/02	Thorium-230	0 ± 1.00	Filtered	DL
RS-54	Primary	03/01/02	Thorium-232	0 ± 1.00	Filtered	DL
RS-54	Primary	03/01/02	Uranium-233/234	16.44 ± 5.00	Filtered	DL

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RS-54	Primary	03/01/02	Uranium-235	0.66 ± 1.00	Filtered	DL
RS-54	Primary	03/01/02	Uranium-238	16.38 ± 5.00	Filtered	DL
RS-54	Primary	11/07/02	Thorium-228	0.033 ± 0.049	Filtered	ES
RS-54	Primary	11/07/02	Thorium-230	0.037 ± 0.057	Filtered	ES
RS-54	Primary	11/07/02	Thorium-232	0 ± 0.008	Filtered	ES
RS-54	Primary	11/07/02	Uranium-233/234	14.9 ± 0.71	Filtered	ES
RS-54	Primary	11/07/02	Uranium-235	0.629 ± 0.10	Filtered	ES
RS-54	Primary	11/07/02	Uranium-238	13.3 ± 0.65	Filtered	ES
HAR-14	Primary	03/16/93	Radium-226	<0.6	Filtered	CEP
HAR-14	Primary	03/16/93	Radium-228	<1	Filtered	CEP
HAR-14	Primary	06/08/93	Radium-226	2.7 ± 1.0	Filtered	CEP
HAR-14	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
HAR-14	Primary	11/04/93	Radium-226	0.16 ± 0.15	Filtered	LAS
HAR-15	Primary	03/16/93	Uranium-234	6.90 ± 3.00	Filtered	CEP
HAR-15	Primary	03/16/93	Uranium-235	0.51 ± 0.20	Filtered	CEP
HAR-15	Primary	03/16/93	Uranium-238	15.9 ± 5.8	Filtered	CEP
HAR-15	Primary	03/16/93	Radium-226	29.5 ± 4.2	Filtered	CEP
HAR-15	Primary	03/16/93	Radium-228	<1	Filtered	CEP
HAR-15	Primary	03/16/93	Radium-226 (dissolved)	<0.6	Filtered	CEP
HAR-15	Primary	03/16/93	Radium-228 (dissolved)	<1	Filtered	CEP
HAR-15	Primary	06/08/93	Radium-226	24.9 ± 4.3	Filtered	CEP
HAR-15	Primary	06/08/93	Radium-226 (dissolved)	<0.6	Filtered	CEP
HAR-15	Primary	06/08/93	Radium-228 (dissolved)	2 ± 1	Filtered	CEP
HAR-15	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
HAR-15	Primary	11/04/93	Radium-226	1.18 ± 0.28	Filtered	LAS
HAR-15	Primary	11/04/93	Uranium-233/4 (dissolved)	0.84 ± 0.39	Filtered	LAS
HAR-15	Primary	11/04/93	Uranium-235 (dissolved)	0.08 ± 0.12	Filtered	LAS
HAR-15	Primary	11/04/93	Uranium-238 (dissolved)	0.88 ± 0.39	Filtered	LAS
Chatsworth Formation Wells						
RD-05B	Primary	03/16/93	Radium-226	<0.6	Filtered	CEP
RD-05B	Primary	03/16/93	Radium-228	<1	Filtered	CEP
RD-05B	Primary	06/07/93	Radium-226	4.9 ± 2.0	Filtered	CEP
RD-05B	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
RD-05B	Primary	11/22/93	Radium-226	0.77 ± 0.27	Filtered	LAS

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-06	Primary	10/31/89	Uranium-234	1.20 ± 0.302	Unfiltered	UST
RD-06	Primary	10/31/89	Uranium-234	0.892 ± 0.227	Filtered	UST
RD-06	Primary	10/31/89	Uranium-235	0.154 ± 0.111	Unfiltered	UST
RD-06	Primary	10/31/89	Uranium-235	0.143 ± 0.0508	Filtered	UST
RD-06	Primary	10/31/89	Uranium-238	1.08 ± 0.274	Unfiltered	UST
RD-06	Primary	10/31/89	Uranium-238	0.710 ± 0.193	Filtered	UST
RD-06	Primary	10/31/89	Radium-226	1.23 ± 0.268	Unfiltered	UST
RD-06	Primary	10/31/89	Radium-226	0.825 ± 0.202	Filtered	UST
RD-06	Primary	10/31/89	Thorium-228	0.0714 ± 0.0323	Unfiltered	UST
RD-06	Primary	10/31/89	Thorium-228	0.0428 ± 0.0360	Filtered	UST
RD-06	Primary	10/31/89	Thorium-230	0.00185 ± 0.00642	Unfiltered	UST
RD-06	Primary	10/31/89	Thorium-230	0.00196 ± 0.00392	Filtered	UST
RD-06	Primary	10/31/89	Thorium-232	0.00185 ± 0.00371	Unfiltered	UST
RD-06	Primary	10/31/89	Thorium-232	0.00 ± 0.00588	Filtered	UST
RD-06	Primary	03/16/93	Radium-226	<0.6	Filtered	UST
RD-06	Primary	03/16/93	Radium-228	<1	Filtered	UST
RD-06	Primary	06/07/93	Radium-226	3.5 ± 2.7	Filtered	CEP
RD-06	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
RD-06	Primary	11/22/93	Radium-226	1.32 ± 0.34	Filtered	LAS
RD-07	Primary	02/05/98	Uranium-233/234	5.46 ± 0.28	Filtered	TN
RD-07	Primary	02/05/98	Uranium-235	0.226 ± 0.048	Filtered	TN
RD-07	Primary	02/05/98	Uranium-238	4.87 ± 0.26	Filtered	TN
RD-07	Primary	02/05/98	Thorium-228	0.032 ± 0.032	Filtered	TN
RD-07	Primary	02/05/98	Thorium-230	0.040 ± 0.043	Filtered	TN
RD-07	Primary	02/05/98	Thorium-232	0 ± 0.005	Filtered	TN
RD-07	Primary	02/06/99	Thorium-228	0.026 ± 0.016	Filtered	TN
RD-07	Primary	02/06/99	Thorium-230	0.028 ± 0.040	Filtered	TN
RD-07	Primary	02/06/99	Thorium-232	0 ± 0.008	Filtered	TN
RD-07	Primary	02/06/99	Uranium-233/234	7.76 ± 0.51	Filtered	TN
RD-07	Primary	02/06/99	Uranium-235	0.414 ± 0.10	Filtered	TN
RD-07	Primary	02/06/99	Uranium-238	6.68 ± 0.45	Filtered	TN
RD-07	Primary	03/16/00	Thorium-228	-0.098 ± 0.14	Filtered	TR
RD-07	Primary	03/16/00	Thorium-230	0.644 ± 0.232 B	Filtered	TR
RD-07	Primary	03/16/00	Thorium-232	0.014 ± 0.028	Filtered	TR

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-07	Primary	03/16/00	Uranium-233/234	4.37 ± 0.40	Filtered	TR
RD-07	Primary	03/16/00	Uranium-235	0.193 ± 0.092	Filtered	TR
RD-07	Primary	03/16/00	Uranium-238	3.62 ± 0.362 B	Filtered	TR
RD-07	Primary	02/23/01	Thorium-228	0.056 ± 0.79	Filtered	ES
RD-07	Primary	02/23/01	Thorium-230	-0.028 ± 0.045	Filtered	ES
RD-07	Primary	02/23/01	Thorium-232	0 ± 0.023	Filtered	ES
RD-07	Primary	02/23/01	Uranium-233/234	5.26 ± 0.39	Filtered	ES
RD-07	Primary	02/23/01	Uranium-235	0.322 ± 0.091	Filtered	ES
RD-07	Primary	02/23/01	Uranium-238	4.22 ± 0.34	Filtered	ES
RD-07	Primary	02/22/02	Thorium-228	0.21 ± 1.00	Filtered	DL
RD-07	Primary	02/22/02	Thorium-230	0 ± 1.00	Filtered	DL
RD-07	Primary	02/22/02	Thorium-232	0 ± 1.00	Filtered	DL
RD-07	Primary	02/22/02	Uranium-233/234	9.22 ± 3.00	Filtered	DL
RD-07	Primary	02/22/02	Uranium-235	0.33 ± 1.00	Filtered	DL
RD-07	Primary	02/22/02	Uranium-238	8.19 ± 3.00	Filtered	DL
RD-07	Primary	01/29/03	Thorium-228	0.058 ± 0.020	Filtered	ES
RD-07	Primary	01/29/03	Thorium-230	0.029 ± 0.047	Filtered	ES
RD-07	Primary	01/29/03	Thorium-232	0.004 ± 0.008	Filtered	ES
RD-07	Primary	01/29/03	Uranium-233/234	14.7 ± 0.51	Filtered	ES
RD-07	Primary	01/29/03	Uranium-235	0.551 ± 0.084	Filtered	ES
RD-07	Primary	01/29/03	Uranium-238	11.8 ± 0.44	Filtered	ES
RD-07(Z13)	Primary	08/28/03	Radium-226	0.289J ± 0.035	Filtered	ES
RD-07(Z13)	Primary	08/28/03	Radium-228	11.8 ± 0.44	Filtered	ES
RD-13	Primary	10/31/89	Plutonium 239/240	0.00239 ± 0.00576	Filtered	UST
RD-13	Primary	10/31/89	Plutonium-238	-0.000770 ± 0.00589	Filtered	UST
RD-13	Primary	08/26/97	Uranium-233/234	2.22 ± 0.33	Unfiltered	LAS
RD-13	Primary	08/26/97	Uranium-235	0.124 ± 0.077	Unfiltered	LAS
RD-13	Primary	08/26/97	Uranium-238	1.38 ± 0.25	Unfiltered	LAS
RD-13	Primary	08/26/97	Uranium-233/234	2.06 ± 0.32	Filtered	LAS
RD-13	Primary	08/26/97	Uranium-235	0.089 ± 0.065	Filtered	LAS
RD-13	Primary	08/26/97	Uranium-238	1.29 ± 0.24	Filtered	LAS
RD-14	Primary	10/31/89	Uranium-234	2.99 ± 0.539	Unfiltered	UST
RD-14	Primary	10/31/89	Uranium-234	2.63 ± 0.453	Filtered	UST
RD-14	Primary	10/31/89	Uranium-235	0.0662 ± 0.0881	Unfiltered	UST

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-14	Primary	10/31/89	Uranium-235	0.131 ± 0.0889	Filtered	UST
RD-14	Primary	10/31/89	Uranium-238	2.68 ± 0.495	Unfiltered	UST
RD-14	Primary	10/31/89	Uranium-238	2.57 ± 0.441	Filtered	UST
RD-14	Primary	10/31/89	Radium-226	0.469 ± 0.137	Unfiltered	UST
RD-14	Primary	10/31/89	Radium-228	0.585 ± 0.160	Filtered	UST
RD-14	Primary	10/31/89	Radium-228	0.747 ± 0.391	Unfiltered	UST
RD-14	Primary	10/31/89	Radium-228	0.901 ± 0.492	Filtered	UST
RD-14	Primary	10/31/89	Thorium-228	0.0404 ± 0.0288	Unfiltered	UST
RD-14	Primary	10/31/89	Thorium-228	0.0406 ± 0.0347	Filtered	UST
RD-14	Primary	10/31/89	Thorium-230	0.00388 ± 0.00550	Unfiltered	UST
RD-14	Primary	10/31/89	Thorium-232	0.00 ± 0.0142	Filtered	UST
RD-14	Primary	10/31/89	Thorium-232	0.0136 ± 0.0104	Unfiltered	UST
RD-14	Primary	10/31/89	Thorium-232	0.00410 ± 0.0153	Filtered	UST
RD-15	Primary	05/10/01	Uranium-233/234	4.81 ± 0.88	Filtered	ES
RD-15	Primary	05/10/01	Uranium-235	0.296 ± 0.22	Filtered	ES
RD-15	Primary	05/10/01	Uranium-238	4.59 ± 0.82	Filtered	ES
RD-15	Primary	03/06/02	Uranium-233/234	3.07 ± 1.00	Filtered	DL
RD-15	Primary	03/06/02	Uranium-235	0.30 ± 1.00	Filtered	DL
RD-15	Primary	03/06/02	Uranium-238	2.84 ± 1.00	Filtered	DL
RD-15	Primary	02/26/03	Uranium-233/234	2.86 ± 0.20	Filtered	ES
RD-15	Primary	02/26/03	Uranium-235	0.122 ± 0.043	Filtered	ES
RD-15	Primary	02/26/03	Uranium-238	2.71 ± 0.19	Filtered	ES
RD-17	Primary	02/08/99	Thorium-228	0.018 ± 0.048	Filtered	TN
RD-17	Primary	02/08/99	Thorium-230	0.072 ± 0.060	Filtered	TN
RD-17	Primary	02/08/99	Thorium-232	0.012 ± 0.024	Filtered	TN
RD-17	Primary	02/08/99	Uranium-233/234	1.56 ± 0.16	Filtered	TN
RD-17	Primary	02/08/99	Uranium-235	0.103 ± 0.043	Filtered	TN
RD-17	Primary	02/08/99	Uranium-238	1.19 ± 0.14	Filtered	TN
RD-18	Primary	03/17/93	Radium-226	4.0 ± 2.4	Filtered	CEP
RD-18	Primary	03/17/93	Radium-228	<1	Filtered	CEP
RD-18	Primary	06/08/93	Radium-226	10.8 ± 3.8	Filtered	CEP
RD-18	Primary	06/08/93	Radium-228	<1	Filtered	CEP
RD-18	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
RD-18	Primary	11/04/93	Radium-226	0.84 ± 0.27	Filtered	LAS

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-19	Primary	03/08/93	Uranium-234	12.8 ± 2.8	Filtered	CEP
RD-19	Primary	03/08/93	Uranium-235	0.51 ± 0.20	Filtered	CEP
RD-19	Primary	03/08/93	Uranium-238	16.3 ± 3.2	Filtered	CEP
RD-19	Primary	02/06/96	Uranium-233/234	3.71 ± 0.55	Filtered	LAS
RD-19	Primary	02/06/96	Uranium-235	0.32 ± 0.16	Filtered	LAS
RD-19	Primary	02/06/96	Uranium-238	3.22 ± 0.50	Filtered	LAS
RD-19	Primary	02/06/98	Uranium-233/234	13.0 ± 0.54	Filtered	TN
RD-19	Primary	02/06/98	Uranium-235	0.723 ± 0.092	Filtered	TN
RD-19	Primary	02/06/98	Uranium-238	12.4 ± 0.52	Filtered	TN
RD-19	Primary	02/06/98	Thorium-228	0.008 ± 0.031	Filtered	TN
RD-19	Primary	02/06/98	Thorium-230	<0.069	Filtered	TN
RD-19	Primary	02/06/98	Thorium-232	0.018 ± 0.015	Filtered	TN
RD-21	Primary	10/24/01	Uranium-233/234	6.91 ± 0.21	Filtered	DL
RD-21	Primary	10/24/01	Uranium-235	0.21 ± 0.08	Filtered	DL
RD-21	Primary	10/24/01	Uranium-238	6.40 ± 0.20	Filtered	DL
RD-23	Primary	02/08/99	Thorium-228	0.073 ± 0.040	Filtered	TN
RD-23	Primary	02/08/99	Thorium-230	0.016 ± 0.046	Filtered	TN
RD-23	Primary	02/08/99	Thorium-232	0.003 ± 0.013	Filtered	TN
RD-23	Primary	02/08/99	Uranium-233/234	1.16 ± 0.15	Filtered	TN
RD-23	Primary	02/08/99	Uranium-235	0.097 ± 0.041	Filtered	TN
RD-23	Primary	02/08/99	Uranium-238	1.08 ± 0.14	Filtered	TN
RD-24	Primary	11/14/03	Uranium-235	(U)	Filtered	ES
RD-24	Primary	11/14/03	Thorium-234	(U)	Filtered	ES
RD-24	Primary	11/14/03	Radium-226	0.654 ± 0.075 (J)	Filtered	ES
RD-24	Primary	11/14/03	Radium-228	1.61 ± 0.27	Filtered	ES
RD-24	Split	11/14/03	Uranium-235	11.3 ± 7.28 (U)	Filtered	STL
RD-24	Split	11/14/03	Thorium-234	124 ± 236 (U)	Filtered	STL
RD-24	Split	11/14/03	Radium-226	1.15 ± 0.338	Filtered	STL
RD-24	Split	11/14/03	Radium-228	2.93 ± 0.884 (J)	Filtered	STL
RD-25	Primary	02/09/95	Uranium-233/234	7.00 ± 0.69	Unfiltered	LAS
RD-25	Primary	02/09/95	Uranium-235	0.43 ± 0.15	Unfiltered	LAS
RD-25	Primary	02/09/95	Uranium-238	6.35 ± 0.65	Unfiltered	LAS
RD-25	Primary	11/13/03	Uranium-235	(U)	Filtered	ES
RD-25	Primary	11/13/03	Thorium-234	(U)	Filtered	ES

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-25	Primary	11/13/03	Radium-226	0.630 ± 0.073 (J)	Filtered	ES
RD-25	Primary	11/13/03	Radium-228	0.971 ± 0.21 (J)	Filtered	ES
RD-27	Primary	11/14/03	Uranium-235	(U)	Filtered	ES
RD-27	Primary	11/14/03	Thorium-234	(U)	Filtered	ES
RD-27	Split	11/14/03	Uranium-235	5.76 ± 7 (U)	Filtered	STL
RD-27	Split	11/14/03	Thorium-234	198 ± 268 (U)	Filtered	STL
RD-28	Primary	02/09/95	Uranium-233/234	8.08 ± 0.73	Unfiltered	LAS
RD-28	Primary	02/09/95	Uranium-235	0.57 ± 0.16	Unfiltered	LAS
RD-28	Primary	02/09/95	Uranium-238	7.29 ± 0.68	Unfiltered	LAS
RD-28	Primary	08/28/97	Uranium-233/234	15.5 ± 1.1	Filtered	LAS
RD-28	Primary	08/28/97	Uranium-235	0.86 ± 0.20	Filtered	LAS
RD-28	Primary	08/28/97	Uranium-238	14.7 ± 1.1	Filtered	LAS
RD-28	Primary	02/05/98	Uranium-233/234	12.9 ± 0.76	Filtered	TN
RD-28	Primary	02/05/98	Uranium-235	0.848 ± 0.15	Filtered	TN
RD-28	Primary	02/05/98	Uranium-238	12.0 ± 0.71	Filtered	TN
RD-28	Primary	02/05/98	Thorium-228	0.009 ± 0.036	Filtered	TN
RD-28	Primary	02/05/98	Thorium-230	<0.158	Filtered	TN
RD-28	Primary	02/05/98	Thorium-232	0.009 ± 0.018	Filtered	TN
RD-28	Primary	02/16/99	Thorium-228	0.014 ± 0.017	Filtered	TN
RD-28	Primary	02/16/99	Thorium-230	0.061 ± 0.041	Filtered	TN
RD-28	Primary	02/16/99	Thorium-232	<0.013	Filtered	TN
RD-28	Primary	02/16/99	Uranium-233/234	12.1 ± 0.83	Filtered	TN
RD-28	Primary	02/16/99	Uranium-235	0.741 ± 0.16	Filtered	TN
RD-28	Primary	02/16/99	Uranium-238	11.6 ± 0.80	Filtered	TN
RD-28	Primary	02/16/00	Thorium-228	0.039 ± 0.11	Filtered	TR
RD-28	Primary	02/16/00	Thorium-230	0.421 ± 0.212 B	Filtered	TR
RD-28	Primary	02/16/00	Thorium-232	0.066 ± 0.079	Filtered	TR
RD-28	Primary	02/16/00	Uranium-233/234	8.90 ± 0.81	Filtered	TR
RD-28	Primary	02/16/00	Uranium-235	0.562 ± 0.19	Filtered	TR
RD-28	Primary	02/16/00	Uranium-238	8.70 ± 0.80	Filtered	TR
RD-28	Primary	02/07/01	Thorium-228	0.027 ± 0.080	Filtered	ES
RD-28	Primary	02/07/01	Thorium-230	0.053 ± 0.066	Filtered	ES
RD-28	Primary	02/07/01	Thorium-232	0.007 ± 0.013	Filtered	ES
RD-28	Primary	02/07/01	Uranium-233/234	9.00 ± 0.40	Filtered	ES

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RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-28	Primary	02/07/01	Uranium-235	0.485 ± 0.073	Filtered	ES
RD-28	Primary	02/07/01	Uranium-238	8.20 ± 0.37	Filtered	ES
RD-28	Primary	02/25/02	Thorium-228	0 ± 1.00	Filtered	DL
RD-28	Primary	02/25/02	Thorium-230	0 ± 1.00	Filtered	DL
RD-28	Primary	02/25/02	Thorium-232	0 ± 1.00	Filtered	DL
RD-28	Primary	02/25/02	Uranium-233/234	4.50 ± 0.50	Filtered	DL
RD-28	Primary	02/25/02	Uranium-235	0.20 ± 0.50	Filtered	DL
RD-28	Primary	02/25/02	Uranium-238	4.50 ± 0.50	Filtered	DL
RD-28	Primary	02/24/03	Thorium-228	0.044 ± 0.031	Filtered	ES
RD-28	Primary	02/24/03	Thorium-230	0.037 ± 0.050	Filtered	ES
RD-28	Primary	02/24/03	Thorium-232	0.016 ± 0.012	Filtered	ES
RD-28	Primary	02/24/03	Uranium-233/234	9.37 ± 0.40	Filtered	ES
RD-28	Primary	02/24/03	Uranium-235	0.409 ± 0.078	Filtered	ES
RD-28	Primary	02/24/03	Uranium-238	9.31 ± 0.40	Filtered	ES
RD-28	Primary	11/14/03	Uranium-235	(U)	Filtered	ES
RD-28	Primary	11/14/03	Thorium-234	(U)	Filtered	ES
RD-28	Primary	11/14/03	Radium-226	0.659 ± 0.076 (J)	Filtered	ES
RD-28	Primary	11/14/03	Radium-228	1.32 ± 0.27	Filtered	ES
RD-29	Primary	12/08/89	Radium-226	0.844 ± 0.205	Unfiltered	UST
RD-29	Primary	12/08/89	Radium-226	0.832 ± 0.188	Filtered	UST
RD-29	Primary	12/08/89	Radium-228	1.61 ± 0.592	Unfiltered	UST
RD-29	Primary	12/08/89	Radium-228	1.17 ± 0.474	Filtered	UST
RD-29	Primary	12/08/89	Uranium-234	15.6 ± 1.61	Unfiltered	UST
RD-29	Primary	12/08/89	Uranium-235	0.626 ± 0.142	Unfiltered	UST
RD-29	Primary	12/08/89	Uranium-238	14.1 ± 1.46	Unfiltered	UST
RD-29	Primary	12/08/89	Total Uranium	22.2 ± 6.20	Unfiltered	UST
RD-29	Primary	03/27/90	Radium-226	0.636 ± 0.171	Unfiltered	UST
RD-29	Primary	03/27/90	Radium-228	0.816 ± 0.414	Unfiltered	UST
RD-29	Primary	03/27/90	Uranium-234	15.7 ± 2.49	Unfiltered	UST
RD-29	Primary	03/27/90	Uranium-235	1.39 ± 0.360	Unfiltered	UST
RD-29	Primary	03/27/90	Uranium-238	16.8 ± 2.67	Unfiltered	UST
RD-29	Primary	03/05/91	Uranium-234	9.54 ± 0.971	Filtered	IT
RD-29	Primary	03/05/91	Uranium-235	0.324 ± 0.0748	Filtered	IT
RD-29	Primary	03/05/91	Uranium-238	9.21 ± 0.940	Filtered	IT

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-29	Primary	03/03/92	Uranium-234	1.32 ± 0.57	Unfiltered	CEP
RD-29	Primary	03/03/92	Uranium-235	<0.6	Unfiltered	CEP
RD-29	Primary	03/03/92	Uranium-238	1.44 ± 0.58	Unfiltered	CEP
RD-29	Primary	05/09/01	Uranium-233/234	3.19 ± 0.28	Filtered	ES
RD-29	Primary	05/09/01	Uranium-235	0.180 ± 0.072	Filtered	ES
RD-29	Primary	05/09/01	Uranium-238	3.14 ± 0.27	Filtered	ES
RD-29	Primary	05/03/02	Uranium-233/234	9.74 ± 0.30	Filtered	DL
RD-29	Primary	05/03/02	Uranium-235	0.51 ± 0.11	Filtered	DL
RD-29	Primary	05/03/02	Uranium-238	9.23 ± 0.31	Filtered	DL
RD-29	Primary	05/13/03	Uranium-233/234	8.74 ± 0.55	Filtered	ES
RD-29	Primary	05/13/03	Uranium-235	0.366 ± 0.069	Filtered	ES
RD-29	Primary	05/13/03	Uranium-238	8.21 ± 0.52	Filtered	ES
RD-30	Primary	08/20/96	Uranium-234	5.63 ± 0.61	Filtered	LAS
RD-30	Primary	08/20/96	Uranium-235	0.49 ± 0.16	Filtered	LAS
RD-30	Primary	08/20/96	Uranium-238	5.54 ± 0.60	Filtered	LAS
RD-30	Primary	11/14/03	Uranium-235	(U)	Filtered	ES
RD-30	Primary	11/14/03	Thorium-234	(U)	Filtered	ES
RD-30	Primary	11/14/03	Radium-226	0.235 ± 0.045 (J)	Filtered	ES
RD-30	Primary	11/14/03	Radium-228	0.261 ± 0.2 (U)	Filtered	ES
RD-33A	Primary	05/10/94	Strontium-90	-0.07 ± 0.64	Filtered	LAS
RD-33B	Primary	05/10/94	Strontium-90	0.06 ± 0.69	Filtered	LAS
RD-33C	Primary	05/09/94	Strontium-90	-0.04 ± 0.8	Filtered	LAS
RD-34A	Primary	09/13/92	Radium-226	1.6 ± 0.3	Filtered	CEP
RD-34A	Primary	09/13/92	Radium-228	<1	Filtered	CEP
RD-34A	Primary	09/13/92	Uranium-234	15.4 ± 4.4	Unfiltered	CEP
RD-34A	Primary	09/13/92	Uranium-235	0.90 ± 0.50	Unfiltered	CEP
RD-34A	Primary	09/13/92	Uranium-238	19.3 ± 4.9	Unfiltered	CEP
RD-34A	Primary	12/05/92	Thorium-228	<0.6	Filtered	CEP
RD-34A	Primary	12/05/92	Thorium-230	<0.6	Filtered	CEP
RD-34A	Primary	12/05/92	Thorium-232	<0.6	Filtered	CEP
RD-34A	Primary	12/05/92	Uranium-234	1.22 ± 0.92	Unfiltered	CEP
RD-34A	Primary	12/05/92	Uranium-235	<0.6	Unfiltered	CEP
RD-34A	Primary	12/05/92	Uranium-238	1.42 ± 0.44	Unfiltered	CEP
RD-34A	Primary	03/09/93	Thorium-228	<0.6	Filtered	CEP

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-34A	Primary	03/09/93	Thorium-230	<0.6	Filtered	CEP
RD-34A	Primary	03/09/93	Thorium-232	<0.6	Filtered	CEP
RD-34A	Primary	03/09/93	Uranium-234	12.1 ± 4.9	Filtered	CEP
RD-34A	Primary	03/09/93	Uranium-235	<0.6	Filtered	CEP
RD-34A	Primary	03/09/93	Uranium-238	10.8 ± 5.4	Filtered	CEP
RD-34A	Primary	06/22/93	Uranium-234	0.9 ± 0.2	Filtered	CEP
RD-34A	Primary	06/22/93	Uranium-235	0.3 ± 0.3	Filtered	CEP
RD-34A	Primary	06/22/93	Uranium-238	1.3 ± 0.2	Filtered	CEP
RD-34A	Primary	06/22/93	Thorium-228	0.00 ± 0.05	Filtered	CEP
RD-34A	Primary	06/22/93	Thorium-230	0.00 ± 0.05	Filtered	CEP
RD-34A	Primary	06/22/93	Thorium-232	0.00 ± 0.05	Filtered	CEP
RD-34A	Primary	08/24/93	Uranium-234	4.6 ± 0.6	Filtered	CEP
RD-34A	Primary	08/24/93	Uranium-235	0.2 ± 0.1	Filtered	CEP
RD-34A	Primary	08/24/93	Uranium-238	4.9 ± 0.7	Filtered	CEP
RD-34A	Primary	08/24/93	Thorium-228	0.00 ± 0.05	Filtered	CEP
RD-34A	Primary	08/24/93	Thorium-230	0.00 ± 0.05	Filtered	CEP
RD-34A	Primary	08/24/93	Thorium-232	0.00 ± 0.05	Filtered	CEP
RD-34A	Primary	08/24/93	Uranium-233/234	10.3 ± 1.6	Filtered	LAS
RD-34A	Primary	08/24/93	Uranium-235	0.78 ± 0.39	Filtered	LAS
RD-34A	Primary	08/24/93	Uranium-238	11.7 ± 1.8	Filtered	LAS
RD-34A	Primary	08/24/93	Thorium-228	-0.12 ± 0.22	Filtered	LAS
RD-34A	Primary	11/18/93	Thorium-230	0.76 ± 0.37	Filtered	LAS
RD-34A	Primary	11/18/93	Thorium-232	0.33 ± 0.25	Filtered	LAS
RD-34A	Primary	05/09/94	Strontium-90	-0.28 ± 0.63	Filtered	LAS
RD-34A	Primary	11/09/94	Technetium-99	1.3 ± 1.1	Unfiltered	LAS
RD-34A	Primary	05/27/98	Uranium-233/234	9.60 ± 0.89	Filtered	TN
RD-34A	Primary	05/27/98	Uranium-235	0.57 ± 0.18	Filtered	TN
RD-34A	Primary	05/27/98	Uranium-238	10.5 ± 0.95	Filtered	TN
RD-34A	Primary	05/27/98	Thorium-228	<0.04	Filtered	TN
RD-34A	Primary	05/27/98	Thorium-230	<0.08	Filtered	TN
RD-34A	Primary	05/27/98	Thorium-232	0.01 ± 0.02	Filtered	TN
RD-34A	Primary	05/09/01	Thorium-228	0.050 ± 0.17	Filtered	ES
RD-34A	Primary	05/09/01	Thorium-230	0.050 ± 0.13	Filtered	ES
RD-34A	Primary	05/09/01	Thorium-232	0.034 ± 0.034	Filtered	ES

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-34A	Primary	05/09/01	Uranium-233/234	10.0 ± 0.54	Filtered	ES
RD-34A	Primary	05/09/01	Uranium-235	0.523 ± 0.096	Filtered	ES
RD-34A	Primary	05/09/01	Uranium-238	10.6 ± 0.56	Filtered	ES
RD-34A	Primary	05/16/03	Thorium-228	0.017U ± 0.058	Filtered	ES
RD-34A	Primary	05/16/03	Thorium-230	0.058U ± 0.058	Filtered	ES
RD-34A	Primary	05/16/03	Thorium-232	0.006U ± 0.023	Filtered	ES
RD-34A	Primary	05/16/03	Uranium-233/234	8.23 ± 0.62	Filtered	ES
RD-34A	Primary	05/16/03	Uranium-235	0.362 ± 0.098	Filtered	ES
RD-34A	Primary	05/16/03	Uranium-238	8.52 ± 0.64	Filtered	ES
RD-34B	Primary	05/10/94	Strontium-90	-0.09 ± 0.66	Filtered	LAS
RD-34C	Primary	05/09/94	Strontium-90	-0.47 ± 0.6	Filtered	LAS
RD-35B	Primary	08/18/99	Thorium-228	0 ± 0.18	Filtered	TN
RD-35B	Primary	08/18/99	Thorium-230	-0.044 ± 0.13	Filtered	TN
RD-35B	Primary	08/18/99	Thorium-232	0.022 ± 0.044	Filtered	TN
RD-35B	Primary	08/18/99	Uranium-233/234	0.713 ± 0.19	Filtered	TN
RD-35B	Primary	08/18/99	Uranium-235	0.050 ± 0.050	Filtered	TN
RD-35B	Primary	08/18/99	Uranium-238	0.362 ± 0.13	Filtered	TN
RD-44	Primary	08/24/97	Radon-222	358 ± 31	Unfiltered	LAS
RD-47	Primary	08/24/97	Radon-222	698 ± 47	Unfiltered	LAS
RD-50	Primary	05/05/94	Uranium-233/234	5.85 ± 0.89	Filtered	LAS
RD-50	Primary	05/05/94	Uranium-235	1.22 ± 0.39	Filtered	LAS
RD-50	Primary	05/05/94	Uranium-238	3.24 ± 0.65	Filtered	LAS
RD-54A	Primary	02/08/98	Uranium-233/234	0.650 ± 0.079	Filtered	TN
RD-54A	Primary	02/08/98	Uranium-235	0.015 ± 0.015	Filtered	TN
RD-54A	Primary	02/08/98	Uranium-238	0.496 ± 0.065	Filtered	TN
RD-54A	Primary	02/08/98	Thorium-228	0.011 ± 0.034	Filtered	TN
RD-54A	Primary	02/08/98	Thorium-230	<0.077	Filtered	TN
RD-54A	Primary	02/08/98	Thorium-232	0.025 ± 0.017	Filtered	TN
RD-54A	Primary	02/08/99	Thorium-228	0.007 ± 0.070	Filtered	TN
RD-54A	Primary	02/08/99	Thorium-230	0.028 ± 0.070	Filtered	TN
RD-54A	Primary	02/08/99	Thorium-232	0 ± 0.014	Filtered	TN
RD-54A	Primary	02/08/99	Uranium-233/234	6.58 ± 0.42	Filtered	TN
RD-54A	Primary	02/08/99	Uranium-235	0.307 ± 0.079	Filtered	TN
RD-54A	Primary	02/08/99	Uranium-238	5.79 ± 0.39	Filtered	TN

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-54A	Primary	03/15/00	Thorium-228	0.090 ± 0.13	Filtered	TR
RD-54A	Primary	03/15/00	Thorium-230	0.822 ± 0.262 B	Filtered	TR
RD-54A	Primary	03/15/00	Thorium-232	0.026 ± 0.051	Filtered	TR
RD-54A	Primary	03/15/00	Uranium-233/234	1.55 ± 0.34	Filtered	TR
RD-54A	Primary	03/15/00	Uranium-235	0.080 ± 0.080	Filtered	TR
RD-54A	Primary	03/15/00	Uranium-238	1.53 ± 0.342 B	Filtered	TR
RD-54A	Primary	10/26/01	Thorium-228	0.36 ± 0.20	Filtered	DL
RD-54A	Primary	10/26/01	Thorium-230	0.44 ± 0.61	Filtered	DL
RD-54A	Primary	10/26/01	Thorium-232	0.55 ± 0.05	Filtered	DL
RD-54A	Primary	10/26/01	Uranium-233/234	8.82 ± 0.23	Filtered	DL
RD-54A	Primary	10/26/01	Uranium-235	0.22 ± 0.04	Filtered	DL
RD-54A	Primary	10/26/01	Uranium-238	7.34 ± 0.21	Filtered	TR
RD-54A	Primary	02/27/02	Thorium-228	0 ± 1.00	Filtered	DL
RD-54A	Primary	02/27/02	Thorium-230	0 ± 1.00	Filtered	DL
RD-54A	Primary	02/27/02	Thorium-232	0 ± 1.00	Filtered	DL
RD-54A	Primary	02/27/02	Uranium-233/234	4.10 ± 0.19	Filtered	DL
RD-54A	Primary	02/27/02	Uranium-235	0.10 ± 0.10	Filtered	DL
RD-54A	Primary	02/27/02	Uranium-238	4.00 ± 0.17	Filtered	DL
RD-54A	Primary	02/18/03	Thorium-228	0.052 ± 0.048	Filtered	ES
RD-54A	Primary	02/18/03	Thorium-230	0.091 ± 0.10	Filtered	ES
RD-54A	Primary	02/18/03	Thorium-232	-0.004 ± 0.016	Filtered	ES
RD-54A	Primary	02/18/03	Uranium-233/234	7.13 ± 0.50	Filtered	ES
RD-54A	Primary	02/18/03	Uranium-235	0.389 ± 0.12	Filtered	ES
RD-54A	Primary	02/18/03	Uranium-238	6.18 ± 0.45	Filtered	ES
RD-54B	Primary	02/08/99	Thorium-228	<0.084	Filtered	TN
RD-54B	Primary	02/08/99	Thorium-230	-0.013 ± 0.050	Filtered	TN
RD-54B	Primary	02/08/99	Thorium-232	-0.006 ± 0.013	Filtered	TN
RD-54B	Primary	02/08/99	Uranium-233/234	0.062 ± 0.048	Filtered	TN
RD-54B	Primary	02/08/99	Uranium-235	0.012 ± 0.012	Filtered	TN
RD-54B	Primary	02/08/99	Uranium-238	0.048 ± 0.029	Filtered	TN
RD-54C	Primary	02/09/99	Thorium-228	0.013 ± 0.038	Filtered	TN
RD-54C	Primary	02/09/99	Thorium-230	0.064 ± 0.064	Filtered	TN
RD-54C	Primary	02/09/99	Thorium-232	0.006 ± 0.013	Filtered	TN
RD-54C	Primary	02/09/99	Uranium-233/234	0 ± 0.036	Filtered	TN

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WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
RD-54C	Primary	02/09/99	Uranium-235	0.011 ± 0.022	Filtered	TN
RD-54C	Primary	02/09/99	Uranium-238	0.018 ± 0.018	Filtered	TN
RD-56A	Primary	05/10/94	Uranium-233/234	2.61 ± 0.59	Filtered	LAS
RD-56A	Primary	05/10/94	Uranium-235	0.34 ± 0.21	Filtered	LAS
RD-56A	Primary	05/10/94	Uranium-238	2.08 ± 0.53	Filtered	LAS
RD-56A	Primary	05/10/94	Thorium-228	0.035 ± 0.059	Filtered	LAS
RD-56A	Primary	05/10/94	Thorium-230	0.005 ± 0.037	Filtered	LAS
RD-56A	Primary	05/10/94	Thorium-232	0.024 ± 0.022	Filtered	LAS
RD-56A	Primary	05/10/94	Strontium-90	-0.08 ± 0.62	Filtered	LAS
RD-57	Primary	05/10/94	Uranium-233/234	1.2 ± 0.33	Filtered	LAS
RD-57	Primary	05/10/94	Uranium-235	0.3 ± 0.16	Filtered	LAS
RD-57	Primary	05/10/94	Uranium-238	0.93 ± 0.29	Filtered	LAS
RD-57	Primary	05/10/94	Thorium-228	0.014 ± 0.062	Filtered	LAS
RD-57	Primary	05/10/94	Thorium-230	0.019 ± 0.04	Filtered	LAS
RD-57	Primary	05/10/94	Thorium-232	0.008 ± 0.016	Filtered	LAS
RD-57	Primary	05/10/94	Strontium-90	-0.03 ± 0.7	Filtered	LAS
RD-59A	Primary	08/16/94	Strontium-90	0.56 ± 0.68	Filtered	LAS
RD-59B	Primary	08/16/94	Strontium-90	0.07 ± 0.70	Filtered	LAS
RD-59C	Primary	08/16/94	Strontium-90	-0.33 ± 0.74	Filtered	LAS
RD-63	Primary	11/06/96	Uranium-233/234	3.66 ± 0.40	Filtered	LAS
RD-63	Primary	11/06/96	Uranium-235	0.207 ± 0.085	Filtered	LAS
RD-63	Primary	11/06/96	Uranium-238	2.92 ± 0.35	Filtered	LAS
RD-64	Primary	05/10/01	Uranium-233/234	2.21 ± 0.20	Filtered	ES
RD-64	Primary	05/10/01	Uranium-235	0.116 ± 0.054	Filtered	ES
RD-64	Primary	05/10/01	Uranium-238	1.67 ± 0.17	Filtered	ES
RD-64	Primary	02/28/02	Uranium-233/234	2.87 ± 0.15	Filtered	DL
RD-64	Primary	02/28/02	Uranium-235	0 ± 1.00	Filtered	DL
RD-64	Primary	02/28/02	Uranium-238	1.70 ± 0.14	Filtered	DL
RD-64	Primary	01/29/03	Uranium-233/234	2.43 ± 0.20	Filtered	ES
RD-64	Primary	01/29/03	Uranium-235	0.096 ± 0.044	Filtered	ES
RD-64	Primary	01/29/03	Uranium-238	2.04 ± 0.18	Filtered	ES
WS-04A	Primary	03/18/93	Radium-226	<0.6	Filtered	CEP
WS-04A	Primary	03/18/93	Radium-228	<1	Filtered	CEP
WS-04A	Primary	06/10/93	Radium-226	2.3 ± 1.0	Filtered	CEP

See last page of Table E-IV for footnotes and explanations

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TABLE E-IV

RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
WS-04A	Primary	08/23/93	Radium-226	<0.6	Filtered	CEP
WS-04A	Primary	11/04/93	Radium-226	0.79 ± 0.25	Filtered	LAS
WS-13	Dup	11/01/89	Uranium-234	2.01 ± 0.226	Filtered	UST
WS-13	Dup	11/01/89	Uranium-235	0.0697 ± 0.0243	Filtered	UST
WS-13	Dup	11/01/89	Uranium-238	1.31 ± 0.159	Filtered	UST
WS-13	Dup	11/01/89	Radium-226	0.487 ± 0.143	Unfiltered	UST
WS-13	Dup	11/01/89	Radium-226	0.484 ± 0.152	Filtered	UST
WS-13	Dup	11/01/89	Radium-228	0.879 ± 0.479	Unfiltered	UST
WS-13	Dup	11/01/89	Radium-228	0.859 ± 0.531	Filtered	UST
WS-13	Dup	11/01/89	Polonium-210	0.0533 ± 0.0250	Unfiltered	UST
WS-13	Dup	11/01/89	Polonium-210	0.0103 ± 0.0135	Filtered	UST
WS-13	Dup	11/01/89	Thorium-228	0.0390 ± 0.0319	Unfiltered	UST
WS-13	Dup	11/01/89	Thorium-228	0.0906 ± 0.0387	Filtered	UST
WS-13	Dup	11/01/89	Thorium-230	0.00562 ± 0.00840	Unfiltered	UST
WS-13	Dup	11/01/89	Thorium-230	0.0163 ± 0.0110	Filtered	UST
WS-13	Dup	11/01/89	Thorium-232	0.0262 ± 0.0152	Unfiltered	UST
WS-13	Dup	11/01/89	Thorium-232	0.0507 ± 0.0204	Filtered	UST
HAR-07	Primary	03/15/93	Radium-226	<0.6	Filtered	CEP
HAR-07	Primary	03/15/93	Radium-228	<1	Filtered	CEP
HAR-07	Primary	06/09/93	Radium-226	9.0 ± 3.5	Filtered	CEP
HAR-07	Reanalysis	06/09/93	Radium-226	<0.6	Filtered	CEP
HAR-07	Reanalysis	06/09/93	Radium-228	2 ± 1	Filtered	CEP
HAR-07	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
HAR-07	Primary	11/04/93	Radium-226	0.33 ± 0.15	Filtered	LAS
HAR-16	Primary	03/15/93	Radium-226	<0.6	Filtered	CEP
HAR-16	Primary	03/15/93	Radium-228	<1	Filtered	CEP
HAR-16	Primary	06/09/93	Radium-226	<0.6	Filtered	CEP
HAR-16	Primary	08/09/93	Radium-226	461 ± 500	Filtered	CEP
HAR-16	Primary	08/09/93	Radium-228	<1	Filtered	CEP
HAR-16	Reanalysis	08/09/93	Radium-226	<0.6	Filtered	CEP
HAR-16	Primary	11/22/93	Radium-226	0.25 ± 0.16	Filtered	LAS
HAR-16	Primary	02/04/94	Radium-226	0.15 ± 0.17	Filtered	LAS

See last page of Table E-IV for footnotes and explanations.

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TABLE E-IV
RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
HAR-17	Primary	03/17/93	Radium-226	<0.6	Filtered	CEP
HAR-17	Primary	03/17/93	Radium-228	<1	Filtered	CEP
HAR-17	Primary	06/09/93	Radium-226	3.3 ± 1.4	Filtered	CEP
HAR-17	Primary	08/09/93	Radium-226	<0.6	Filtered	CEP
HAR-17	Primary	11/08/93	Radium-226	0.00 ± 0.10	Filtered	LAS
HAR-18	Primary	05/08/94	Uranium-233/234	12.1 ± 1.4	Filtered	LAS
HAR-18	Primary	05/08/94	Uranium-235	0.55 ± 0.27	Filtered	LAS
HAR-18	Primary	05/08/94	Uranium-238	11.6 ± 1.3	Filtered	LAS
OS-01	Primary	08/15/94	Strontium-90	-0.33 ± 0.75	Filtered	LAS
OS-02	Primary	08/15/94	Strontium-90	-0.13 ± 0.59	Filtered	LAS
OS-03	Primary	08/15/94	Strontium-90	-0.17 ± 0.63	Filtered	LAS
OS-04	Primary	08/15/94	Strontium-90	0.18 ± 0.74	Filtered	LAS
OS-08	Primary	08/15/94	Strontium-90	0.39 ± 0.67	Filtered	LAS
OS-10	Primary	08/05/94	Strontium-90	-0.48 ± 0.65	Filtered	LAS
OS-16	Primary	11/01/89	Uranium-234	2.42 ± 0.275	Filtered	UST
OS-16	Primary	11/01/89	Uranium-235	0.0840 ± 0.0292	Filtered	UST
OS-16	Primary	11/01/89	Uranium-238	2.03 ± 0.237	Filtered	UST
OS-16	Primary	11/01/89	Uranium-238	1.07 ± 0.239	Unfiltered	UST
OS-16	Primary	11/01/89	Radium-226	0.968 ± 0.227	Filtered	UST
OS-16	Primary	11/01/89	Radium-226	1.94 ± 0.767	Unfiltered	UST
OS-16	Primary	11/01/89	Radium-228	1.50 ± 0.723	Filtered	UST
OS-16	Primary	11/01/89	Radium-228	0.0357 ± 0.0209	Unfiltered	UST
OS-16	Primary	11/01/89	Polonium-210	0.0265 ± 0.0216	Filtered	UST
OS-16	Primary	11/01/89	Polonium-210	0.109 ± 0.0410	Unfiltered	UST
OS-16	Primary	11/01/89	Thorium-228	0.0319 ± 0.0352	Filtered	UST
OS-16	Primary	11/01/89	Thorium-228	0.00534 ± 0.00618	Unfiltered	UST
OS-16	Primary	11/01/89	Thorium-230	0.00942 ± 0.00947	Filtered	UST
OS-16	Primary	11/01/89	Thorium-230	0.0889 ± 0.0265	Unfiltered	UST
OS-16	Primary	11/01/89	Thorium-232	0.00 ± 0.00707	Filtered	UST
OS-16	Primary	11/01/89	Uranium-234	2.48 ± 0.277	Filtered	UST
OS-16	Primary	11/01/89	Uranium-235	0.0541 ± 0.0227	Filtered	UST
OS-16	Primary	11/01/89	Uranium-238	1.99 ± 0.250	Filtered	UST
OS-16	Dup	11/01/89	Radium-226	0.993 ± 0.223	Unfiltered	UST
OS-16	Dup	11/01/89	Radium-226	1.09 ± 0.230	Filtered	UST

See last page of Table E-IV for footnotes and explanations.

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TABLE E-IV

RESULTS OF ANALYSES FOR SPECIFIC ISOTOPES IN GROUNDWATER SAMPLES
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

WELL IDENTIFIER	SAMPLE TYPE	DATE SAMPLED	ISOTOPE	CONCENTRATION (picocuries per liter)	SAMPLE HANDLING	LABORATORY
OS-16	Dup	11/01/89	Radium-228	1.84 ± 0.644	Unfiltered	UST
OS-16	Dup	11/01/89	Radium-228	1.62 ± 0.587	Filtered	UST
OS-16	Dup	11/01/89	Thorium-228	0.0456 ± 0.0274	Unfiltered	UST
OS-16	Dup	11/01/89	Thorium-228	0.0250 ± 0.0297	Filtered	UST
OS-16	Dup	11/01/89	Thorium-230	0.00175 ± 0.00350	Unfiltered	UST
OS-16	Dup	11/01/89	Thorium-230	0.00369 ± 0.00739	Filtered	UST
OS-16	Dup	11/01/89	Thorium-232	0.00 ± 0.00525	Unfiltered	UST
OS-16	Dup	11/01/89	Thorium-232	0.00 ± 0.00554	Filtered	UST
OS-21	Primary	11/01/89	Uranium-234	1.54 ± 0.185	Filtered	UST
OS-21	Primary	11/01/89	Uranium-235	0.0306 ± 0.0163	Filtered	UST
OS-21	Primary	11/01/89	Uranium-238	1.06 ± 0.137	Filtered	UST
OS-21	Primary	11/01/89	Radium-226	0.778 ± 0.196	Unfiltered	UST
OS-21	Primary	11/01/89	Radium-226	0.756 ± 0.189	Filtered	UST
OS-21	Primary	11/01/89	Radium-228	1.46 ± 0.597	Unfiltered	UST
OS-21	Primary	11/01/89	Radium-228	1.95 ± 0.704	Filtered	UST
OS-21	Primary	11/01/89	Thorium-228	0.00 ± 0.0355	Unfiltered	UST
OS-21	Primary	11/01/89	Thorium-228	0.149 ± 0.0468	Filtered	UST
OS-21	Primary	11/01/89	Thorium-230	0.00359 ± 0.00509	Unfiltered	UST
OS-21	Primary	11/01/89	Thorium-230	0.0795 ± 0.0265	Filtered	UST
OS-21	Primary	11/01/89	Thorium-232	0.00 ± 0.00539	Unfiltered	UST
OS-21	Primary	11/01/89	Thorium-232	0.0659 ± 0.0247	Filtered	UST

See last page of Table E-IV for footnotes and explanations.

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TABLE E-IV
FOOTNOTES AND EXPLANATIONS

B	=	Radionuclide detected in associated method blank.
J	=	The result is less than the RDL (Required Detection Limit). No U qualifier is assigned.
U	=	The result is less than the MDA (Minimum Detectable Activity).
Z	=	FLUTE port sample number.
(<)	=	Less than; numerical value represents detection limit for that analysis.
pCi/l	=	picocuries per liter.
CEP	=	Controls for Environmental Pollution, Inc., Santa Fe, New Mexico.
DL	=	Davi Laboratories, Pinole, California.
ES	=	Eberline Services (formerly Thermo Retec), Richmond, California.
IT	=	International Technologies, Inc. (formerly UST), Richland, Washington.
LAS	=	LAS Laboratories, Inc. (formerly Lockheed Martin), Las Vegas, Nevada.
STL	=	Severn Trent Laboratories, Richland, Washington.
TN	=	Thermo NUtech, Richmond, California.
TR	=	Thermo Retec (formerly Thermo NUtech), Richmond, California.
UST	=	United States Testing Laboratory, Richland, Washington.

ANALYTICAL METHODS

Radon-222 = EPA Method 903.1.

Radium-226 = EPA method 903.1, Alpha Emitting Radium Isotopes.

Radium-228 = EPA method 904.0, Radium-228.

Isotopic thorium analyzed according to EPA method 907.0 or LAL-0108, LAS in-house procedure.

Isotopic uranium analyzed according to EPA method 908.0, ASTM method D3972-82, EPA method 907.0 or LAL-0108, LAS in-house procedure.

Isotopic radium analyzed according to EPA method 903.

NOTE: Results are presented as the activity plus or minus error. Any activity detected is reported by the laboratory, though the reported activity may be less than the overall laboratory error. Analytical results that are less than the instrument background count are shown as negative values.

Appendix F

APPENDIX F

Constituents of Concern and Perchlorate Concentration versus Time Plots

APPENDIX F

CONSTITUENTS OF CONCERN AND PERCHLORATE CONCENTRATION VERSUS TIME PLOTS

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1,1-Dichloroethane (1,1-DCA)	F-52	through	F-68
1,2-Dichloroethane (1,2-DCA)	F-69	through	F-85
1,4-Dioxane	F-86	through	F-102
Benzene	F-103	through	F-119
Carbon Tetrachloride	F-120	through	F-136
Chloroform	F-137	through	F-153
cis-1,2-Dichloroethene (cis-1,2-DCE)	F-154	through	F-170
Ethylbenzene	F-171	through	F-187
Fluoride	F-188	through	F-202
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Toluene	F-298	through	F-314
trans-1,2-Dichloroethene (trans-1,2-DCE)	F-315	through	F-331
Trichloroethene (TCE)	F-332	through	F-348
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APPENDIX F

CONSTITUENTS OF CONCERN AND PERCHLORATE CONCENTRATION VERSUS TIME PLOTS

Concentration versus time plots presented in this Appendix include historic results from 1994 to present for the principal constituents of concern and perchlorate at permitted wells. Plots for select constituents (1,3-dinitrobenzene, 2-butanone, acetone, ammonia, formaldehyde, trichlorofluoromethane, trichlorotrifluoroethane, m- and p-xylenes, and o-xylene) are not available because of limitations within the water quality database. Tabulated summaries of constituent of concern analytical results are presented for 2003 in this report, for 2000, 2001, and 2002 in Haley & Aldrich (2001, 2002a, 2003a, 2003b), and for all historical samples collected through 1999 in Groundwater Resources Consultants (2000). Results that have been identified as laboratory, field, or equipment contaminants were not included in the plots. --

UNSCANNABLE MEDIA

See Document # 2000771
for scanned image(s) of the media document(s) label(s).

To use the unscannable media document(s),
contact the Superfund Records Center.

Appendix G



APPENDIX G

Permitted Groundwater Remediation Systems

APPENDIX G

PERMITTED GROUNDWATER REMEDIATION SYSTEMS

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G-2 Cumulative Pumpage & VOC Mass Removed to Date – Delta ASU – 2003

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G-4 Cumulative Pumpage & VOC Mass Removed to Date – Bravo ASU – 2003

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G-7 Monthly Pumpage & VOC Mass Removed – STL-IV ASU – 2003

G-8 Cumulative Pumpage & VOC Mass Removed to Date – STL-IV ASU – 2003

TABLE G-1

NPDES PERMIT CA0001309 OUTFALL - 001, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	03/16/03	05/03/03
BOD5 20C	mg/L	30 / 20	3.5	2.3	3.7
CHLORIDE	mg/L	150 / -	4.8	7.1	12
CONDUCTIVITY	umhos/cm	---	95	140	22
DETERGENTS (as MBAS)	mg/L	0.5 / -	<0.1	<0.1	2.0
FLUORIDE	mg/L	1.6 / -	<0.5	<0.5	<0.5
NITRITE AND NITRATE (AS NITROGEN)	mg/L	8 / -	2.1	0.99	0.58
OIL AND GREASE	mg/L	15 / 10	<5	<5	<5
PERCHLORATE	ug/L	---	<4	<4	<4
pH	pH UNITS	6 TO 9	7.1	7.4	7.0
RAINFALL	INCHES	---	5.34	0	2.43
SETTLEABLE SOLIDS	ml/L	0.3 / 0.1	0.30	<0.1	<0.1
SULFATE	mg/L	300 / -	10	13	39
TEMPERATURE	DEG. F	NTE > 100	53.2	57.7	54.5
TOTAL CYANIDE	ug/L	22 / 5.2	<4.2	<4.2	<4.2
TOTAL DISSOLVED SOLIDS	mg/L	950 / -	120	130	220
TOTAL HARDNESS (CaCO3)	mg/L	---	34	43	66
TOTAL ORGANIC CARBON	ug/L	---	1700	15000	12000
TOTAL RESIDUAL CHLORINE	mg/L	0.1 / -	<0.1	<0.1	<0.1
TOTAL SUSPENDED SOLIDS	mg/L	45 / 15	63	<10	240
TURBIDITY	NTU	---	88	25	420
VOLUME DISCHARGED	MGD	178 MGD	5.73	1.1	0.03
RADIOACTIVITY					
GROSS ALPHA	pCi/L	15 / -	3.51 +/-1.49	2.25 +/-1.24	7.4 +/-2.4
GROSS BETA	pCi/L	50 / -	2.36 +/-0.54	0.97 +/-0.42	3.99 +/-0.87
STRONTIUM-90	pCi/L	8 / -	1.29 +/-0.81	0.55 +/-0.44	0.09 +/-0.19
TOTAL COMBINED RADIUM-226 & RADIUM	pCi/L	5 / -	^[1] NA	^[1] NA	^[1] NA
TRITIUM	pCi/L	20,000 / -	000 +/-200	358 +/-218	324 +/-265
METALS					
ANTIMONY	ug/L	6 / -	<2	<2	<2
ARSENIC	ug/L	50 / -	1.7	<1	<1
BARIUM	mg/L	1 / -	0.016	0.013	0.020
BERYLLIUM	ug/L	4 / -	<0.5	<0.5	<0.5
BORON	mg/L	1 / -	0.064	0.076	<0.05
CADMIUM	ug/L	3.7 / 1	<1	<1	<1
CHROMIUM	ug/L	15 / 10	1.3	1.2	<1
COPPER	ug/L	17 / 11	2.5	4.0	3.9
IRON	mg/L	0.3 / -	0.67	0.21	0.18
LEAD	ug/L	65 / 2.5	<1	<1	<1
MANGANESE	ug/L	50 / -	13	2.6	31
MERCURY (EXPRESSED AS DISSOLVED)	ug/L	2.1 / -	<0.2	<0.2	<0.2
MERCURY (EXPRESSED AS TOTAL RECOV	ug/L	- / 2	<0.2	<0.2	<0.2
NICKEL	ug/L	100 / -	4.5	2.2	1.5

See last page of Table G-1 for footnotes and explanations.

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TABLE G-I

NPDES PERMIT CA0001309 OUTFALL - 001, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	03/16/03	05/03/03
SELENIUM (EXPRESSED AS TOTAL RECOVERABLE)	ug/L	20 / 5	<2	<2	<2
SILVER	ug/L	3.4 / -	<1	<1	<1
THALLIUM	ug/L	2 / -	<1	<1	<1
ZINC	ug/L	110 / 100	<20	<20	<20
ORGANICS					
Benzene	ug/l	1 / -	<1	<1	<1
Carbon Tetrachloride	ug/l	0.5 / -	<0.5	<0.5	<0.5
Chloroform	ug/l	100 / -	<2	<2	<2
1,1-Dichloroethane	ug/l	5 / -	<2	<2	<2
1,2-Dichloroethane	ug/l	0.5 / -	<0.5	<0.5	<0.5
1,1-Dichloroethene	ug/l	6 / -	<5	<5	<5
Ethylbenzene	ug/l	680 / -	<2	<2	<2
Tetrachloroethene	ug/l	5 / -	<2	<2	<2
Toluene	ug/l	150 / -	<2	<2	<2
Xylenes (Total)	ug/l	1750 / -	<4	<4	<4
1,1,1-Trichloroethane	ug/l	200 / -	<2	<2	<2
1,1,2-Trichloroethane	ug/l	5 / -	<2	<2	<2
Trichloroethene	ug/l	5 / -	<2	<2	<2
Trichlorofluoromethane	ug/l	150 / -	<5	<5	<5
Vinyl chloride	ug/l	0.5 / -	<0.5	<0.5	<0.5
ADDITIONAL QUARTERLY MONITORING					
2,3,7,8-TCDD	pg/l	---	<0.8	NA	<10
1,1,2,2-Tetrachloroethane	ug/l	---	<2	NA	<2
1,2,4-Trichlorobenzene	ug/l	---	<10	NA	<10
1,2-Dichlorobenzene	ug/l	---	<2	NA	<2
1,2-Dichloropropane	ug/l	---	<2	NA	<2
1,2-Diphenylhydrazine/Azobenzene	ug/l	---	<20	NA	<20
1,3-Dichlorobenzene	ug/l	---	<2	NA	<2
1,4-Dichlorobenzene	ug/l	---	<2	NA	<2
2,4,6-Trichlorophenol	ug/l	---	<20	NA	<20
2,4-Dichlorophenol	ug/l	---	<10	NA	<10
2,4-Dimethylphenol	ug/l	---	<20	NA	<20
2,4-Dinitrophenol	ug/l	---	<20	NA	<20
2,4-Dinitrotoluene	ug/l	---	<10	NA	<10
2,6-Dinitrotoluene	ug/l	---	<10	NA	<10
2-Chloroethylvinylether	ug/l	---	<5	NA	<5
2-Chloronaphthalene	ug/l	---	<10	NA	<10
2-Chlorophenol	ug/l	---	<10	NA	<10
2-Methyl-4,6-dinitrophenol	ug/l	---	<20	NA	<20
2-Nitrophenol	ug/l	---	<10	NA	<10
3,3-Dichlorobenzidine	ug/l	---	<20	NA	<20
4,4'-DDD	ug/l	---	<0.1	NA	<0.1

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TABLE G-I

NPDES PERMIT CA0001309 OUTFALL - 001, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	03/16/03	05/03/03
4,4'-DDE	ug/l	---	<0.1	NA	<0.1
4,4'-DDT	ug/l	---	<0.1	NA	<0.1
4-Bromophenylphenylether	ug/l	---	<10	NA	<10
4-Chlorophenylphenylether	ug/l	---	<10	NA	<10
4-Chloro-3-methylphenol	ug/l	---	<20	NA	<20
4-Nitrophenol	ug/l	---	<20	NA	<20
Acenaphthene	ug/l	---	<10	NA	<10
Acenaphthylene	ug/l	---	<10	NA	<10
Acrolein	ug/l	---	<50	NA	<50
Acrylonitrile	ug/l	---	<50	NA	<50
ACUTE TOXICITY (Fathead Minnow 96hr % 8% SURVIVAL		70% MINIMUM	100	NA	100
Aldrin	ug/l	---	<0.1	NA	<0.1
alpha-BHC	ug/l	---	<0.1	NA	<0.1
Anthracene	ug/l	---	<10	NA	<10
Aroclor-1016	ug/l	---	<1	NA	<1
Aroclor-1221	ug/l	---	<1	NA	<1
Aroclor-1232	ug/l	---	<1	NA	<1
Aroclor-1242	ug/l	---	<1	NA	<1
Aroclor-1248	ug/l	---	<1	NA	<1
Aroclor-1254	ug/l	---	<1	NA	<1
Aroclor-1260	ug/l	---	<1	NA	<1
Benzidine	ug/l	---	<20	NA	<20
Benzo(a)anthracene	ug/l	---	<10	NA	<10
Benzo(a)pyrene	ug/l	---	<10	NA	<10
Benzo(b)fluoranthene	ug/l	---	<10	NA	<10
Benzo(g,h,i)perylene	ug/l	---	<10	NA	<10
Benzo(k)fluoranthene	ug/l	---	<10	NA	<10
beta-BHC	ug/l	---	<0.1	NA	<0.1
bis (2-Chloroethyl) ether	ug/l	---	<10	NA	<10
bis (2-Ethylhexyl) Phthalate	ug/l	---	<50	NA	<50
bis(2-Chloroethoxy) methane	ug/l	---	<10	NA	<10
bis(2-Chloroisopropyl) ether	ug/l	---	<10	NA	<10
Bromodichloromethane	ug/l	---	<2	NA	<2
Bromoform	ug/l	---	<5	NA	<5
Bromomethane	ug/l	---	<5	NA	<5
Butylbenzylphthalate	ug/l	---	<20	NA	<20
Chlordane	ug/l	---	<1	NA	<1
Chlorobenzene	ug/l	---	<2	NA	<2
Chloroethane	ug/l	---	<5	NA	<5
Chloromethane	ug/l	---	<5	NA	<5
CHRONIC TOXICITY (Ceriodaphnia Survival	TUc	1	1	NA	1
Chrysene	ug/l	---	<10	NA	<10
cis-1,3-Dichloropropene	ug/l	---	<2	NA	<2
delta-BHC	ug/l	---	<0.2	NA	<0.2

See last page of Table G-I for footnotes and explanations.

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TABLE G-I

NPDES PERMIT CA0001309 OUTFALL - 001, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	03/16/03	05/03/03
Dibenzo(a,h)anthracene	ug/l	---	<20	NA	<20
Dibromochloromethane	ug/l	---	<2	NA	<2
Dieldrin	ug/l	---	<0.1	NA	<0.1
Diethylphthalate	ug/l	---	<10	NA	<10
Dimethylphthalate	ug/l	---	<10	NA	<10
Di-n-butylphthalate	ug/l	---	<20	NA	<20
Di-n-octylphthalate	ug/l	---	<20	NA	<20
Endosulfan I	ug/l	---	<0.1	NA	<0.1
Endosulfan II	ug/l	---	<0.1	NA	<0.1
Endosulfan sulfate	ug/l	---	<0.2	NA	<0.2
Endrin	ug/l	---	<0.1	NA	<0.1
Endrin aldehyde	ug/l	---	<0.1	NA	<0.1
Fluoranthene	ug/l	---	<10	NA	<10
Fluorene	ug/l	---	<10	NA	<10
Heptachlor	ug/l	---	<0.1	NA	<0.1
Heptachlor epoxide	ug/l	---	<0.1	NA	<0.1
Hexachlorobenzene	ug/l	---	<10	NA	<10
Hexachlorobutadiene	ug/l	---	<10	NA	<10
Hexachlorocyclopentadiene	ug/l	---	<20	NA	<20
Hexachloroethane	ug/l	---	<10	NA	<10
Indeno(1,2,3-cd)pyrene	ug/l	---	<20	NA	<20
Isophorone	ug/l	---	<10	NA	<10
Lindane (gamma-BHC)	ug/l	---	<0.1	NA	<0.1
Methylene Chloride	ug/l	---	<5	NA	<5
Naphthalene	ug/l	---	<10	NA	<10
Nitrobenzene	ug/l	---	<20	NA	<20
n-Nitrosodimethylamine	ug/l	---	<20	NA	<20
n-Nitroso-di-n-propylamine	ug/l	---	<10	NA	<10
n-Nitrosodiphenylamine	ug/l	---	<10	NA	<10
Pentachlorophenol	ug/l	---	<20	NA	<20
Phenanthrene	ug/l	---	<10	NA	<10
Phenol	ug/l	---	<10	NA	<10
Pyrene	ug/l	---	<10	NA	<10
Toxaphene	ug/l	---	<5	NA	<5
trans-1,2-Dichloroethene	ug/l	---	<2	NA	<2
trans-1,3-Dichloropropene	ug/l	---	<2	NA	<2

See last page of Table G-I for footnotes and explanations.

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TABLE G-1
FOOTNOTES AND EXPLANATIONS

(1)	=	Not required unless gross alpha > 5 pCi/l.
(---)	=	Not applicable for these parameters.
NA	=	Not analyzed per permit.
<	=	Not detected; numerical value represents the Reporting Limit for the parameter.
mg/l	=	milligrams per liter.
umhos/cm	=	micromhos per centimeter.
ug/l	=	micrograms per liter.
ml/l	=	milliliters per liter.
NTU	=	Nephelometric turbidity unit.
MGD	=	millions gallons per day.
pCi/l	=	picoCuries per liter.
pg/l	=	picograms per liter.
TUc	=	Chronic toxicity unit.

TABLE G-II

NPDES PERMIT CA0001309 OUTFALL - 002, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

Page 1 of 6

PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	2/13/03 ²	02/27/03	03/05/03 ²	03/15/03	04/14/03	05/03/03
BOD5 20C	mg/L	30 / 20	3.3	2.5	<2	NA	2.8	3.1	3.8
CHLORIDE	mg/L	150 / -	11	25	36	NA	28	29	29
CONDUCTIVITY	umhos/cm	---	180	370	750	NA	490	600	450
DETERGENTS (as MBAS)	mg/L	0.5 / -	<0.2	<0.1	<0.1	NA	<0.1	<0.1	0.13
FLUORIDE	mg/L	1.6 / -	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5
NITRITE AND NITRATE (AS NITROGEN)	mg/L	8 / -	0.75	1.6	0.21	NA	0.43	<0.15	0.20
OIL AND GREASE	mg/L	15 / 10	<5	<5	<5	NA	<5	<5	<5
PERCHLORATE	ug/L	---	<4	<4	<4	NA	<4	<4	<4
pH	pH UNITS	6 TO 9	7.6	7.9	8.2	NA	7.8	7.9	7.6
RAINFALL	INCHES	---	5.34	0	0.11	NA	2.55	1.72	2.43
SETTLEABLE SOLIDS	ml/L	0.3 / 0.1	0.40	<0.1	<0.1	NA	<0.1	<0.1	0.10
SULFATE	mg/L	300 / -	21	75	150	NA	92	130	83
TEMPERATURE	DEG. F	NTE > 100	53.1	NA	50	NA	54	57	57.0
TOTAL CYANIDE	ug/L	22 / 5.2	<4.2	<4.2	<4.2	NA	<4.2	<4.2	<4.2
TOTAL DISSOLVED SOLIDS	mg/L	950 / -	170	220	480	NA	360	390	440
TOTAL HARDNESS (CaCO3)	mg/L	---	63	NA	240	NA	150	200	140
TOTAL ORGANIC CARBON	ug/L	---	9000	NA	6100	NA	NA	13000	12000
TOTAL RESIDUAL CHLORINE	mg/L	0.1 / -	<0.1	<0.1	<0.1	NA	<0.1	<0.1	<0.1
TOTAL SUSPENDED SOLIDS	mg/L	45 / 15	330	13	<10	NA	<10	12	59
TURBIDITY	NTU	---	270	30	2.9	NA	6.5	15	59
VOLUME DISCHARGED	MGD	178 MGD	20.41	2.41	0.09	NA	7.56	0.46	0.11
RADIOACTIVITY									
GROSS ALPHA	pCi/L	15 / -	2.11+/-1.21	NA	4.91+/-1.76	NA	1.76 +/-1.3	3.21 +/-0.99	3.72 +/-1.85
GROSS BETA	pCi/L	50 / -	0.77+/-0.39	NA	1.86+/-1.83	NA	1.33 +/-0.54	2.56 +/-0.88	3.11 +/-0.81
STRONTIUM-90	pCi/L	8 / -	1.46+/-1.18	NA	0.00+/-1.96	NA	0 +/-2	0.32 +/-0.46	0 +/-2
TOTAL COMBINED RADIUM-226 & RADIUM 228 ⁽¹⁾	pCi/L	5 / -	⁽¹⁾ NA	⁽¹⁾ NA	⁽¹⁾ NA	⁽¹⁾ NA	⁽¹⁾ NA	⁽¹⁾ NA	⁽¹⁾ NA
TRITIUM	pCi/L	20,000 / -	170+/-224	NA	645+/-347	NA	465 +/-222	0 +/-200	749 +/-277
METALS									
ANTIMONY	ug/L	6 / -	<2	<2	<2	NA	<2	<2	<2
ARSENIC	ug/L	50 / -	2.3	<1	<1	NA	<1	<1	<1
BARIUM	mg/L	1 / -	0.020	0.023	0.050	NA	0.030	0.036	0.023
BERYLLIUM	ug/L	4 / -	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5
BORON	mg/L	1 / -	<0.05	0.087	0.10	NA	0.066	0.11	0.076

See last page of Table G-II for footnotes and explanations.

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TABLE G-II

NPDES PERMIT CA0001309 OUTFALL - 002, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	2/13/03 ²	02/27/03	03/05/03 ²	03/15/03	04/14/03	05/03/03
CADMIUM	ug/L	3.7 / 1	<1	<1	<1	NA	<1	<1	<1
CHROMIUM	ug/L	15 / 10	1.2	<1	<1	NA	<1	<1	<1
COPPER	ug/L	17 / 11	2.4	3.3	<2	NA	<2	2.1	2.4
IRON	mg/L	0.3 / -	0.70	0.068	0.027	<0.010	0.027	<0.01	0.080
LEAD	ug/L	65 / 2.5	<1	<1	<1	NA	<1	<1	<1
MANGANESE	ug/L	50 / -	17	7.8	1.8	NA	19	4.2	8.4
MERCURY (EXPRESSED AS DISSOLVED)	ug/L	2.1 / -	<0.2	<0.2	<0.2	NA	<0.2	<0.2	<0.2
MERCURY (EXPRESSED AS TOTAL RECOVERABLE)	ug/L	- / 2	0.23	NA	<0.2	NA	<0.2	<0.2	<0.2
NICKEL	ug/L	100 / -	2.0	1.8	1.3	NA	1.1	3.9	<1
SELENIUM (EXPRESSED AS TOTAL RECOVERABLE)	ug/L	20 / 5	<2	NA	<2	NA	<2	<2	<2
SILVER	ug/L	3.4 / -	<1	<1	<1	NA	<1	<1	<1
THALLIUM	ug/L	2 / -	<1	<1	<1	NA	<1	<1	<1
ZINC	ug/L	110 / 100	30	<20	<20	NA	20	<20	<20
ORGANICS									
Benzene	ug/l	1 / -	<1	<1	<1	NA	<1	<1	<1
Carbon Tetrachloride	ug/l	0.5 / -	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5
Chloroform	ug/l	100 / -	<2	<2	<2	NA	<2	<2	<2
1,1-Dichloroethane	ug/l	5 / -	<2	<2	<2	NA	<2	<2	<2
1,2-Dichloroethane	ug/l	0.5 / -	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5
1,1-Dichloroethene	ug/l	6 / -	<5	<5	<5	NA	<5	<5	<5
Ethylbenzene	ug/l	680 / -	<2	<2	<2	NA	<2	<2	<2
Tetrachloroethene	ug/l	5 / -	<2	<2	<2	NA	<2	<2	<2
Toluene	ug/l	150 / -	<2	<2	<2	NA	<2	<2	<2
Xylenes (Total)	ug/l	1750 / -	<4	<4	<4	NA	<4	<4	<4
1,1,1-Trichloroethane	ug/l	200 / -	<2	<2	<2	NA	<2	<2	<2
1,1,2-Trichloroethane	ug/l	5 / -	<2	<2	<2	NA	<2	<2	<2
Trichloroethene	ug/l	5 / -	<2	<2	<2	NA	<2	<2	<2
Trichlorofluoromethane	ug/l	150 / -	<5	<5	<5	NA	<5	<5	<5
Vinyl chloride	ug/l	0.5 / -	<0.5	<0.5	<0.5	NA	<0.5	<0.5	<0.5
ADDITIONAL QUARTERLY MONITORING									
2,3,7,8-TCDD	pg/l	---	<9.6	NA	NA	NA	NA	<10	NA
1,1,2,2-Tetrachloroethane	ug/l	---	<2	<2	<2	NA	NA	<2	NA
1,2,4-Trichlorobenzene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
1,2-Dichlorobenzene	ug/l	---	<2	<2	<2	NA	NA	<2	NA

See last page of Table G-II for footnotes and explanations.

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TABLE G-II

NPDES PERMIT CA0001309 OUTFALL - 002, 2003 RESULTS

BOEING SANTA SUSANA FIELD LABORATORY

VENTURA COUNTY, CALIFORNIA

PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	2/13/03 ²	02/27/03	03/05/03 ²	03/15/03	04/14/03	05/03/03
1,2-Dichloropropane	ug/l	---	<2	<2	<2	NA	NA	<2	NA
1,2-Diphenylhydrazine/Azobenzene	ug/l	---	<20	NA	NA	NA	NA	<20	NA
1,3-Dichlorobenzene	ug/l	---	<2	<2	<2	NA	NA	<2	NA
1,4-Dichlorobenzene	ug/l	---	<2	<2	<2	NA	NA	<2	NA
2,4,6-Trichlorophenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
2,4-Dichlorophenol	ug/l	---	<10	NA	NA	NA	NA	<10	NA
2,4-Dimethylphenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
2,4-Dinitrophenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
2,4-Dinitrotoluene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
2,6-Dinitrotoluene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
2-Chloroethylvinylether	ug/l	---	<5	<5	NA	NA	NA	<5	NA
2-Chloronaphthalene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
2-Chlorophenol	ug/l	---	<10	NA	NA	NA	NA	<10	NA
2-Methyl-4,6-dinitrophenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
2-Nitrophenol	ug/l	---	<10	NA	NA	NA	NA	<10	NA
3,3-Dichlorobenzidine	ug/l	---	<20	NA	NA	NA	NA	<20	NA
4,4'-DDD	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
4,4'-DDE	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
4,4'-DDT	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
4-Bromophenylphenylether	ug/l	---	<10	NA	NA	NA	NA	<10	NA
4-Chlorophenylphenylether	ug/l	---	<10	NA	NA	NA	NA	<10	NA
4-Chloro-3-methylphenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
4-Nitrophenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Acenaphthene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Acenaphthylene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Acrolein	ug/l	---	<50	<50	NA	NA	NA	<50	NA
Acrylonitrile	ug/l	---	<50	<50	NA	NA	NA	<50	NA
ACUTE TOXICITY (Fathead Minnow 96hr % Survival Bioassay)	% SURVIVAL	70% MINIMUM	100	NA	NA	NA	NA	100	NA
Aldrin	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
alpha-BHC	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Anthracene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Aroclor-1016	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Aroclor-1221	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Aroclor-1232	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Aroclor-1242	ug/l	---	<1	NA	NA	NA	NA	<1	NA

See last page of Table G-II for footnotes and explanations.

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TABLE G-II

NPDES PERMIT CA0001309 OUTFALL - 002, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	2/13/03 ²	02/27/03	03/05/03 ²	03/15/03	04/14/03	05/03/03
Aroclor-1248	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Aroclor-1254	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Aroclor-1260	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Benzidine	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Benzo(a)anthracene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Benzo(a)pyrene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Benzo(b)fluoranthene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Benzo(g,h,i)perylene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Benzo(k)fluoranthene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
beta-BHC	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
bis (2-Chloroethyl) ether	ug/l	---	<10	NA	NA	NA	NA	<10	NA
bis (2-Ethylhexyl) Phthalate	ug/l	---	<50	NA	NA	NA	NA	<50	NA
bis(2-Chloroethoxy) methane	ug/l	---	<10	NA	NA	NA	NA	<10	NA
bis(2-Chloroisopropyl) ether	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Bromodichloromethane	ug/l	---	<2	<2	<2	NA	NA	<2	NA
Bromoform	ug/l	---	<5	<5	<5	NA	NA	<5	NA
Bromomethane	ug/l	---	<5	<5	<5	NA	NA	<5	NA
Butylbenzylphthalate	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Chlordane	ug/l	---	<1	NA	NA	NA	NA	<1	NA
Chlorobenzene	ug/l	---	<2	<2	<2	NA	NA	<2	NA
Chloroethane	ug/l	---	<5	<5	<5	NA	NA	<5	NA
Chloromethane	ug/l	---	<5	<5	<5	NA	NA	<5	NA
CHRONIC TOXICITY (Ceriodaphnia Survival & Reproduction)	TUc	1	1	NA	NA	NA	NA	1	NA
Chrysene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
cis-1,3-Dichloropropene	ug/l	---	<2	<2	<2	NA	NA	<2	NA
delta-BHC	ug/l	---	<0.2	NA	NA	NA	NA	<0.2	NA
Dibenzo(a,h)anthracene	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Dibromochloromethane	ug/l	---	<2	<2	<2	NA	NA	<2	NA
Dieldrin	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Diethylphthalate	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Dimethylphthalate	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Di-n-butylphthalate	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Di-n-octylphthalate	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Endosulfan I	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Endosulfan II	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA

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TABLE G-II

NPDES PERMIT CA0001309 OUTFALL - 002, 2003 RESULTS
BOEING SANTA SUSANA FIELD LABORATORY
VENTURA COUNTY, CALIFORNIA

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PARAMETER	UNITS	EFFLUENT LIMITS A=DAILY MAX. B=MONTHLY AVG. (A / B)	02/12/03	2/13/03 ²	02/27/03	03/05/03 ²	03/15/03	04/14/03	05/03/03
Endosulfan sulfate	ug/l	---	<0.2	NA	NA	NA	NA	<0.2	NA
Endrin	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Endrin aldehyde	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Fluoranthene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Fluorene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Heptachlor	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Heptachlor epoxide	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Hexachlorobenzene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Hexachlorobutadiene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Hexachlorocyclopentadiene	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Hexachloroethane	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Indeno(1,2,3-cd)pyrene	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Isophorone	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Lindane (gamma-BHC)	ug/l	---	<0.1	NA	NA	NA	NA	<0.1	NA
Methylene Chloride	ug/l	---	<5	<5	<5	NA	NA	<5	NA
Naphthalene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Nitrobenzene	ug/l	---	<20	NA	NA	NA	NA	<20	NA
n-Nitrosodimethylamine	ug/l	---	<20	NA	NA	NA	NA	<20	NA
n-Nitroso-di-n-propylamine	ug/l	---	<10	NA	NA	NA	NA	<10	NA
n-Nitrosodiphenylamine	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Pentachlorophenol	ug/l	---	<20	NA	NA	NA	NA	<20	NA
Phenanthrene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Phenol	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Pyrene	ug/l	---	<10	NA	NA	NA	NA	<10	NA
Toxaphene	ug/l	---	<5	NA	NA	NA	NA	<5	NA
trans-1,2-Dichloroethene	ug/l	---	<2	<2	<2	NA	NA	<2	NA
trans-1,3-Dichloropropene	ug/l	---	<2	<2	<2	NA	NA	<2	NA

See last page of Table G-II for footnotes and explanations.

Haley & Aldrich, Inc.

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27-February-2004

TABLE G-II
FOOTNOTES AND EXPLANATIONS

(1)	=	Not required unless gross alpha > 5 pCi/l.
(2)	=	Sample collected in response to exceedance on 2/12/03.
(---)	=	Not applicable for these parameters.
NA	=	Not analyzed per permit.
<	=	Not detected; numerical value represents the Reporting Limit for the parameter.
mg/l	=	milligrams per liter.
umhos/cm	=	micromhos per centimeter.
ug/l	=	micrograms per liter.
ml/l	=	milliliters per liter.
NTU	=	Nephelometric turbidity unit.
MGD	=	millions gallons per day.
pCi/l	=	picoCuries per liter.
pg/l	=	picograms per liter.
TUc	=	Chronic toxicity unit.

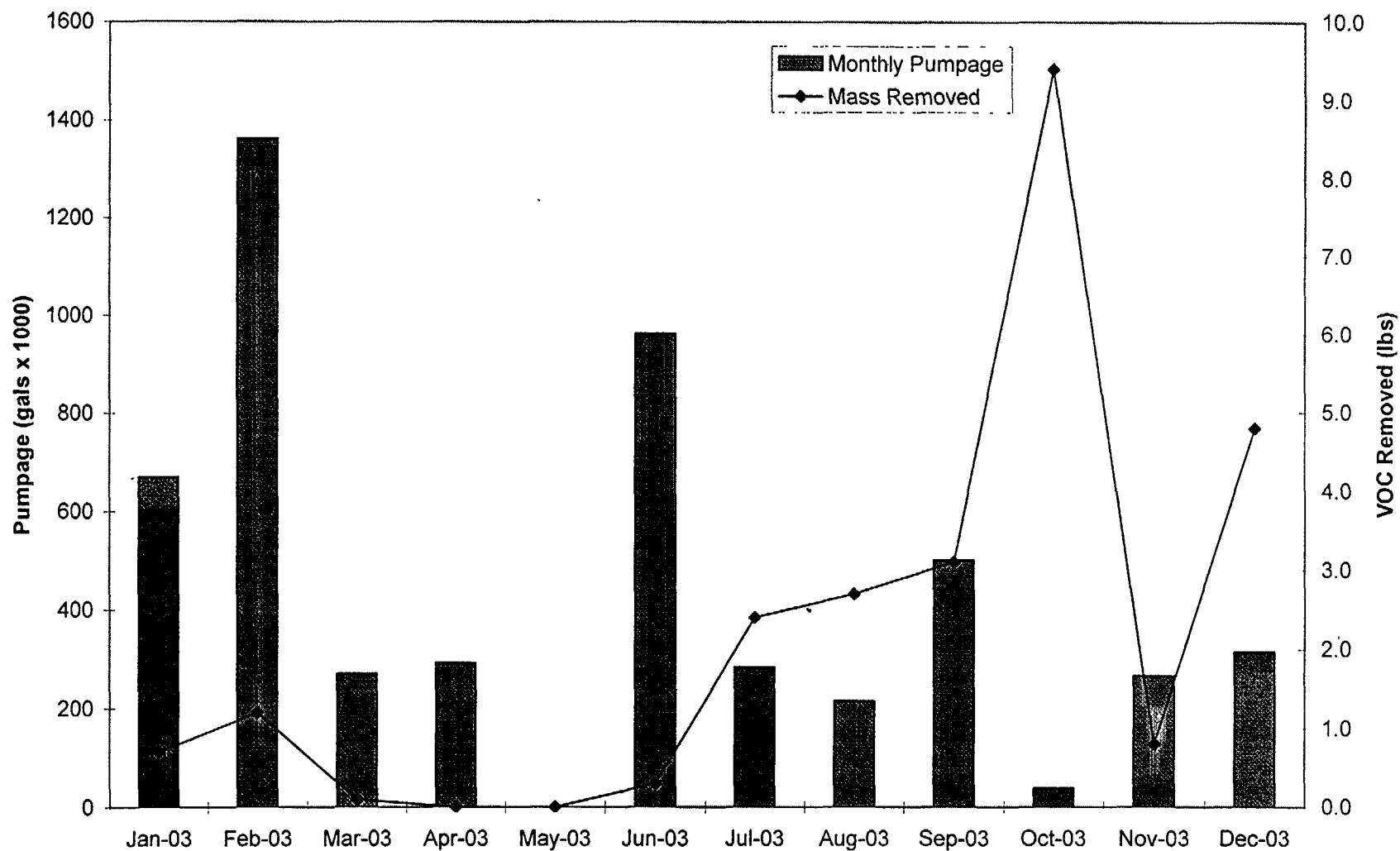


Figure G-1. Monthly Pumpage & VOC Mass Removed-Delta ASU-2003

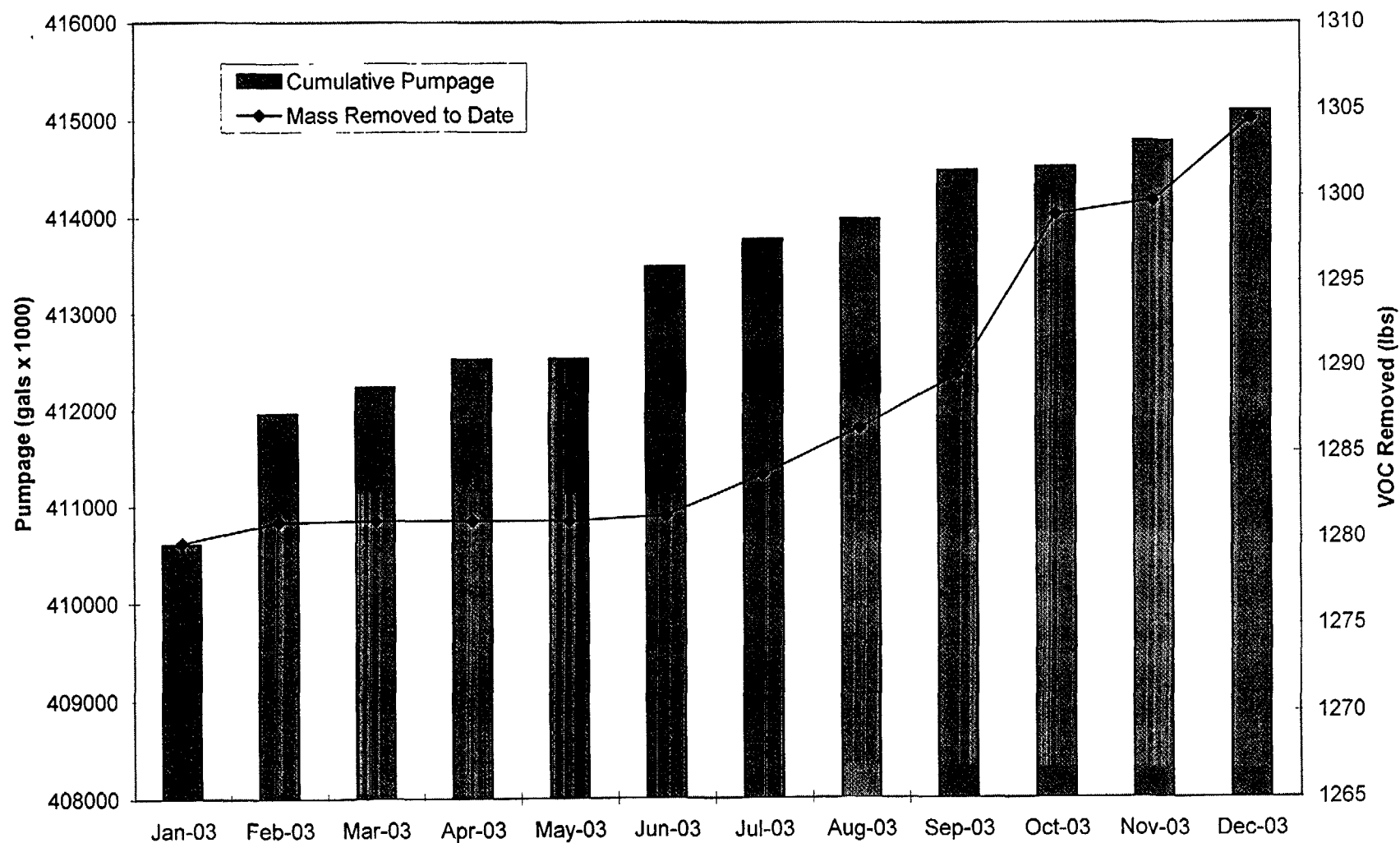


Figure G-2. Cumulative Pumpage & VOC Mass Removed to Date-Delta ASU-2003

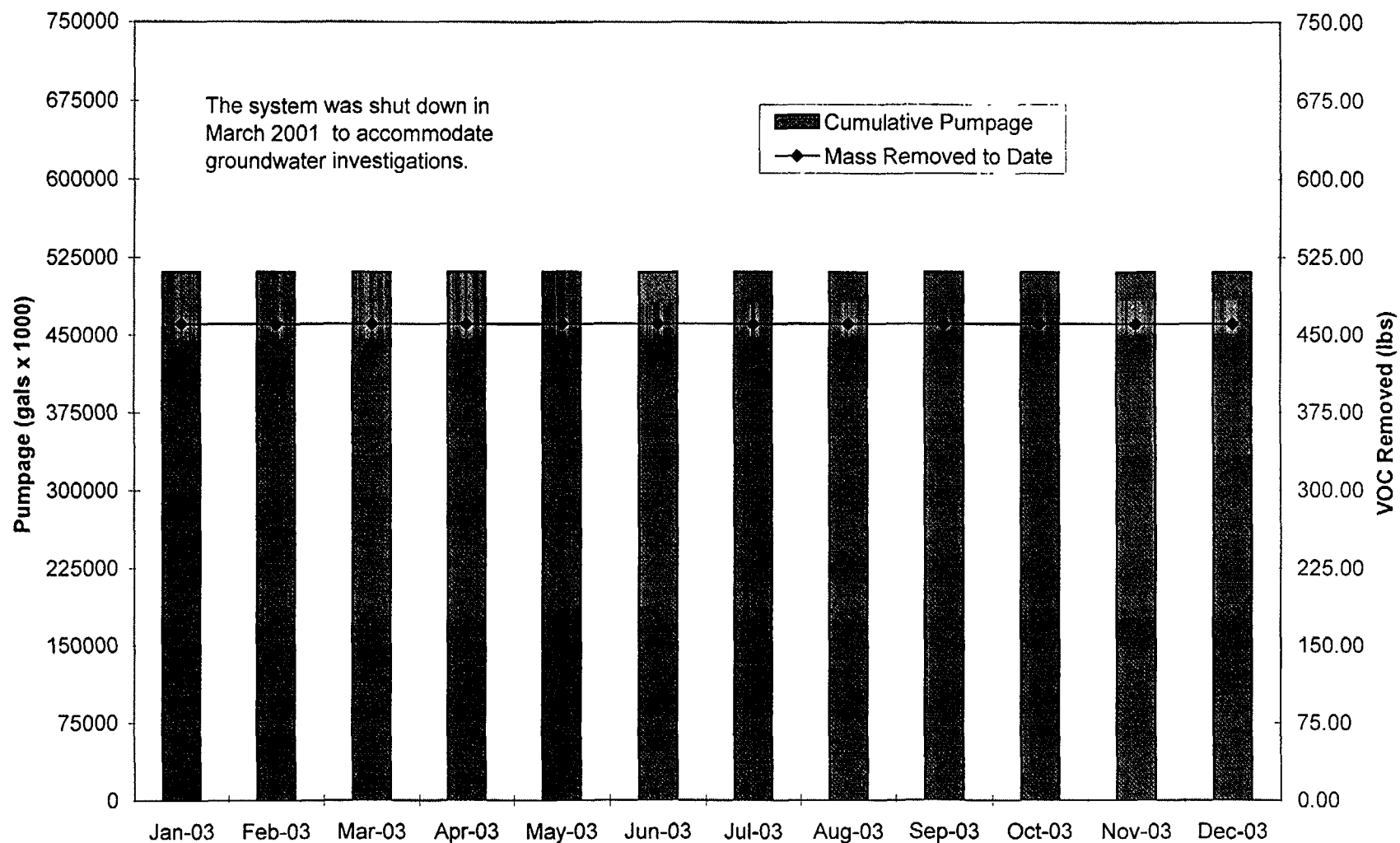


Figure G-3. Cumulative Pumpage & VOC Mass Removed to Date-Alfa ASU-2003

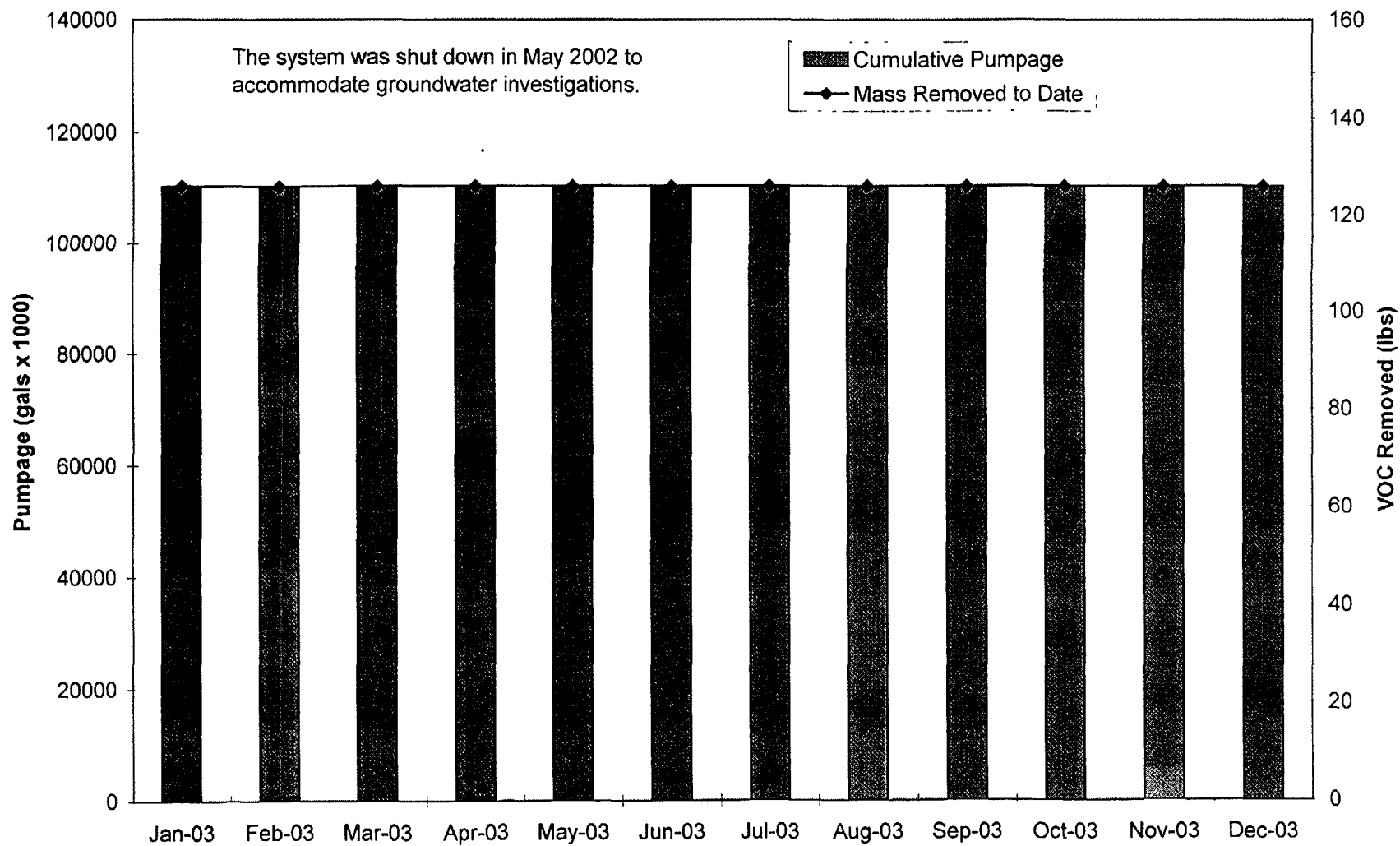


Figure G-4. Cumulative Pumpage & VOC Mass Removed to Date-Bravo ASU-2003

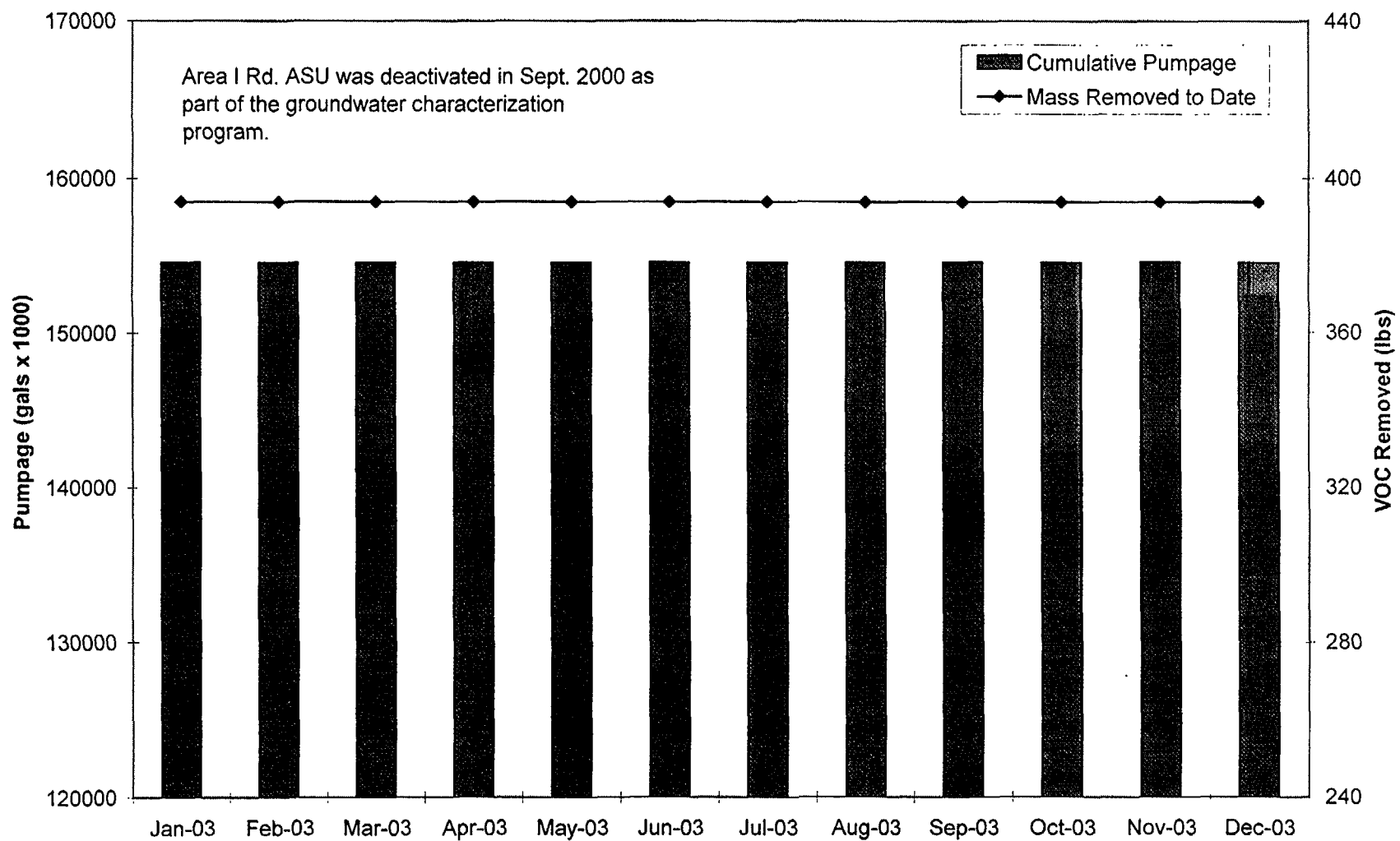


Figure G-5. Cumulative Pumpage & VOC Mass Removed to Date-Area I Rd ASU-2003

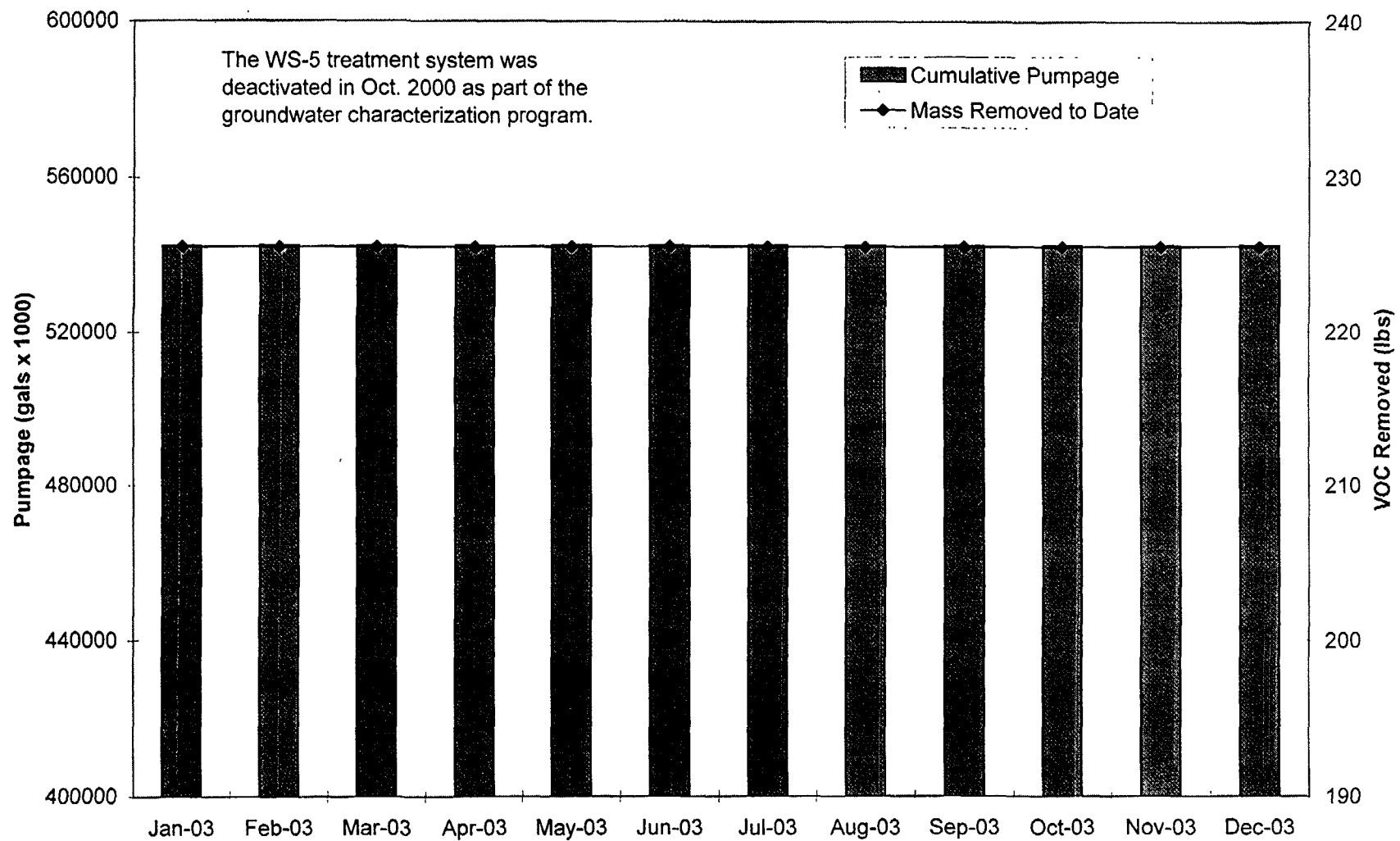


Figure G-6. Cumulative Pumpage & VOC Mass Removed to Date-WS-5 UV/H2O2-2003

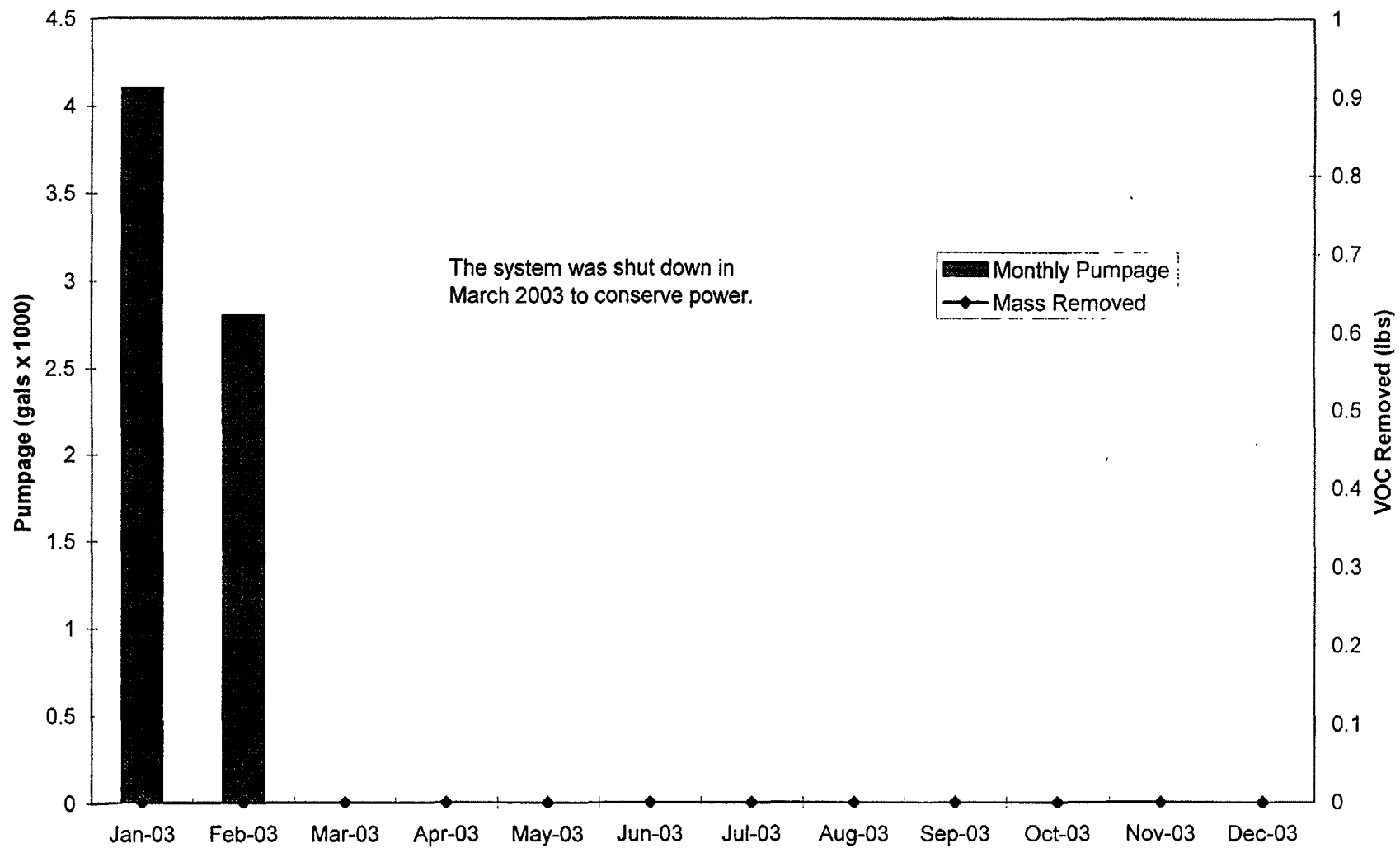


Figure G-7. Monthly Pumpage & VOC Mass Removed-STL-IV ASU-2003

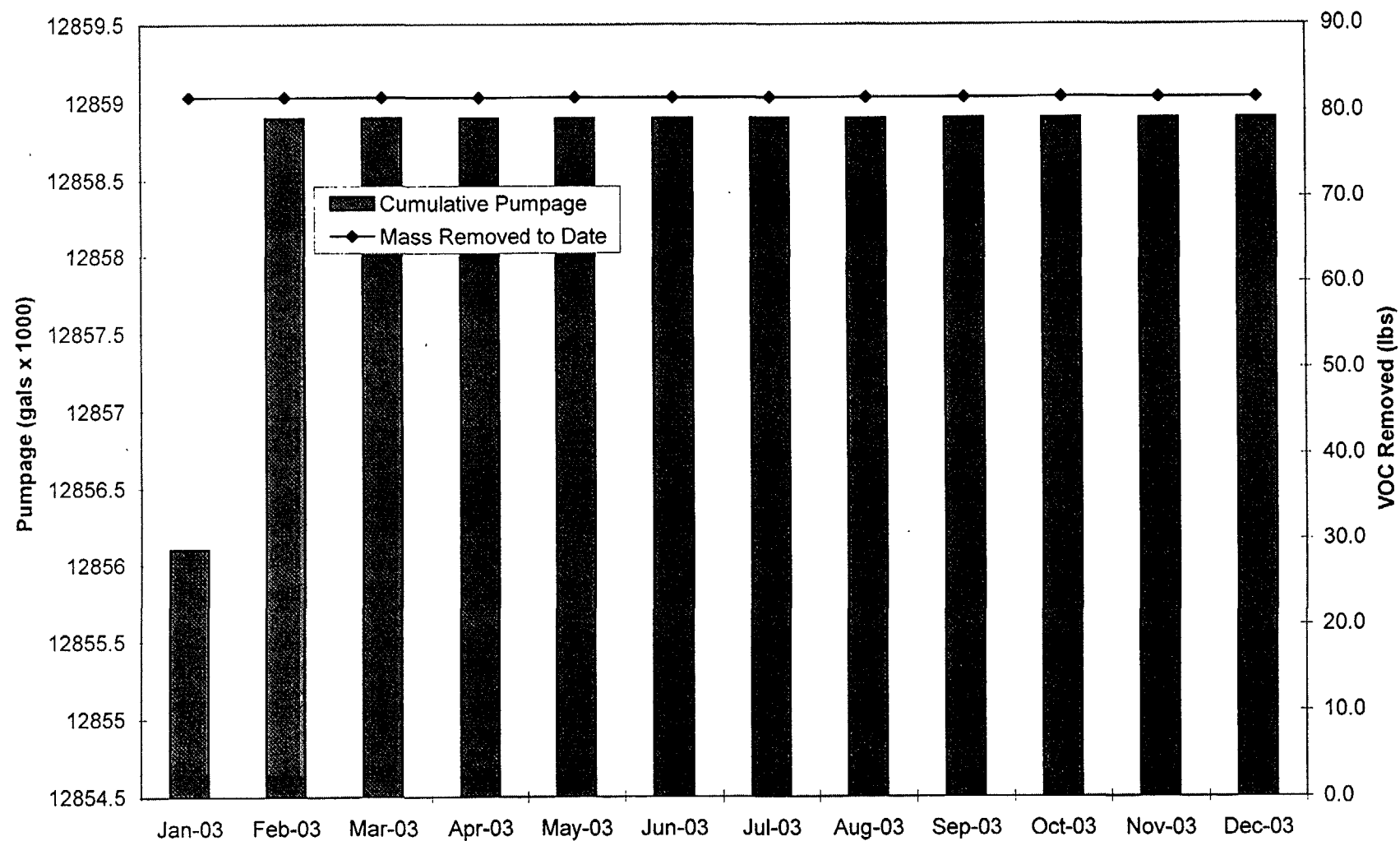
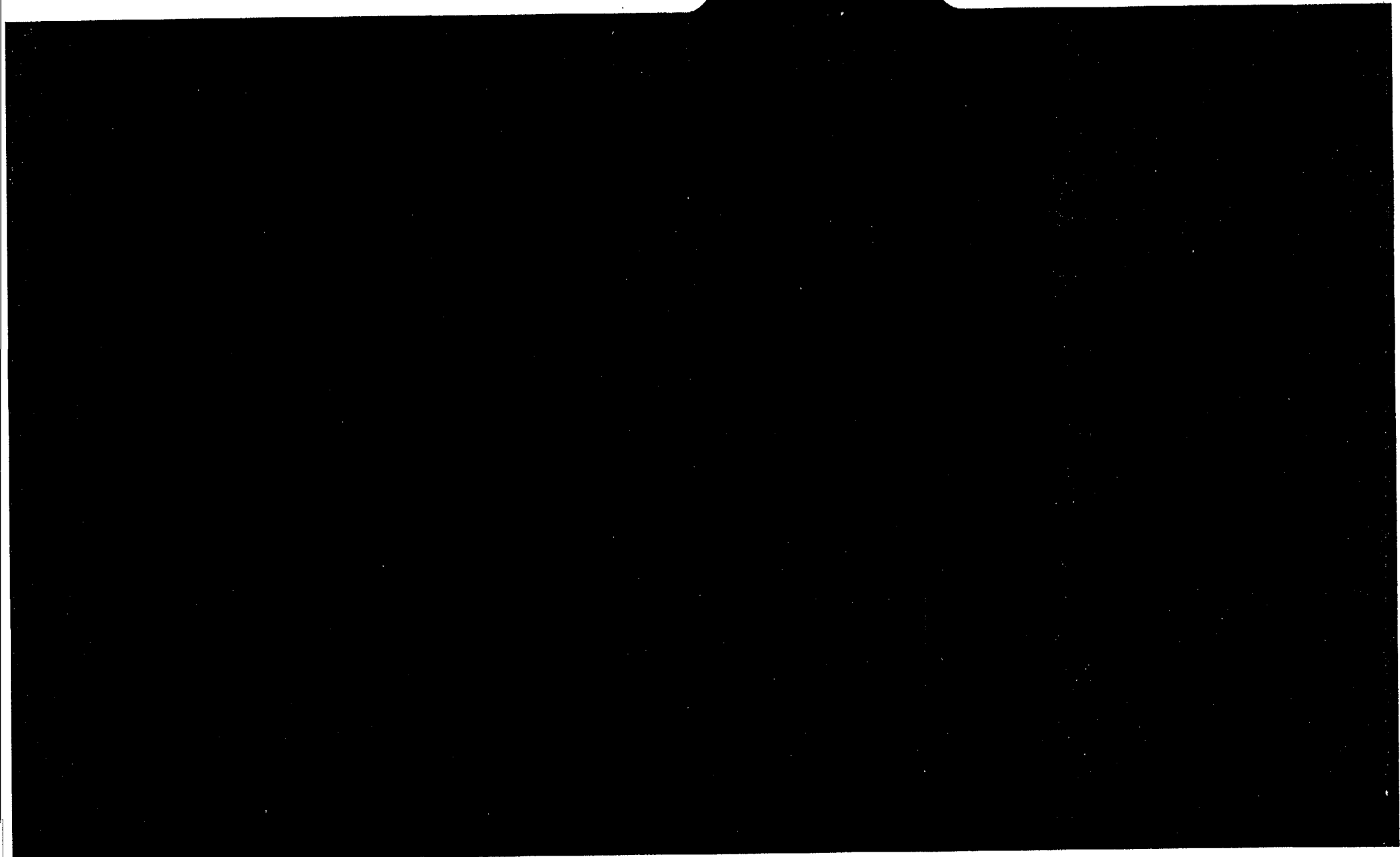


Figure G-8. Cumulative Pumpage & VOC Mass Removed to Date-STL-IV ASU-2003



APPENDIX H

Data Usability Summary Report

APPENDIX H

DATA USABILITY SUMMARY REPORT

Appendix IX Parameter Analyses – April 2003 Sampling Events
Santa Susana Field Laboratory, Ventura County, California
Analytical Laboratory: Del Mar Analytical, Irvine, CA
Report # IMD0808, IMD0858, IMD0958, IMD1033

This data usability summary report presents the findings of the review for the environmental analysis of seven groundwater samples, four trip blank samples, four field blanks, and site specific matrix spike and matrix spike duplicate samples (MS/MSD) from the Santa Susana Field Laboratory (SSFL) in April 2003. These data were evaluated in accordance with guidance from the United States Environmental Protection Agency (USEPA) **National Functional Guidelines for Organic Data Review** (EPA540/R-99/008, October 1999), **National Functional Guidelines for Inorganic Data Review** (EPA540/R-01/008, July 2002) and the respective EPA Method specific protocol criteria, where applicable. This report pertains to the groundwater samples collected by Haley & Aldrich personnel from 14 through 17 April 2003.

The following items/criteria applicable to the QA/QC data and sample analysis data listed above were reviewed:

- Chain of Custody Procedures
- Analytical Holding Time Compliance
- Method and Trip Blank Sample Analyses
- GC/MS and ICP-MS Instrument Performance
- Initial Instrument Calibration Procedures
- Continuing Calibration Verification Procedures
- Surrogate Compound Recoveries
- Laboratory Control Sample Analyses
- Matrix Spike Sample Analyses
- Internal Standard Compound Recoveries
- Sample Data Reporting Procedures
- Laboratory Data Qualification Procedures

Chain of Custody Procedures

External chain of custody documentation was completed by Haley & Aldrich personnel during the performance of sampling activities conducted at SSFL. The external COC documents were completed appropriately upon sample transfer to the primary analytical laboratory personnel (Del Mar Analytical, Irvine, CA). Internal COC documents were produced by Del Mar Analytical and traceable through the execution of the sample analyses within the Irvine, CA facility, and at the subcontractor laboratory facilities engaged to complete specialty analyses prescribed by the Sampling and Analysis Plan (SAP). Del Mar performed the analysis of volatile organic compounds (VOCs) by EPA Method 8260B; 1,2-dibromoethane, 1,2-dibromo-3-chloropropane, and 1,2,3-trichloropropane by EPA Method

504.1; organochlorine pesticides and polychlorinated biphenyls by EPA Methods 8081 and 8082, respectively; elemental constituents by EPA Methods 6010/6020/7470A, total cyanide by EPA Method 9014, and sulfide by EPA Method 376.2. Ceimic Corporation, Narragansett, RI was contracted directly by Haley & Aldrich for the analysis of 1,4-dioxane by modified EPA Method 8260 SIM.

Subcontractor laboratory facilities to Del Mar Analytical included:

- Sequoia Analytical, Morgan Hill, CA for the analysis of organophosphorus pesticides by EPA Method 8141 and organochlorine herbicides by EPA Method 8151;
- Sequoia Analytical, Petaluma, CA for the analysis of semi-volatile organic compounds by EPA Method 8270C;
- Triangle Laboratories, Inc., Durham, NC for the analysis of polychlorinated dibenzo dioxins/furans by EPA Method 8290;
- Weck Laboratories for the analysis of n-Nitrosodimethylamine (NDMA) by EPA Method 1625M; and
- North Creek Analytical, Bothell, WA for the analysis of pentachlorophenol by modified EPA Method 8270.

A review of the COC documents indicate that the sample custody remained intact through the analytical process and the reported results are representative of the samples analyzed. The external and internal COC documents are provided with each laboratory report. No corrective action is recommended.

Holding Time Compliance

Maximum allowable holding times as prescribed by the USEPA, "Test Methods for Evaluating Solid Waste", SW-846, 3rd Edition, Update III, 1996 were applied to the evaluation of each project sample. Holding time compliance was measured from the time of sample collection to the time of sample preparation or analysis.

Each project sample was analyzed within the maximum allowable holding time without exception. No corrective action is recommended.

Blank Sample Analyses

Trip blank samples were provided by Del Mar Analytical and accompanied the project sample containers to and from the project site to assess possible field/container contamination. Trip blank samples were analyzed by Del Mar Analytical for VOCs only. Field blank samples were prepared at the sampled well using de-ionized water provided by Del Mar Analytical. Method blank samples were prepared by the analytical laboratories and analyzed concurrently with the project samples to assess possible laboratory contamination. Several target compounds were detected in associated method, field and trip blank samples prepared and analyzed concurrently with the project samples.

The following table provides a list of the target compounds detected in the project trip, field, and/or method blank sample, the associated project samples, and the recommended corrective action for the presentation of the sample analysis results.

Blank Sample Identification	Target Compound(s) Detected in the Blank	Concentration (ug/l)	Associated Field Samples	Flag Associated Field Sample results with a "U" if less than or equal to this value (ug/L)
SH-04-04 (Field Blank)	Methylene Chloride	6000	SH-04	60000
HAR-14-05 (Trip Blank)	Acetone	6.6	HAR-14, HAR-15	66
HAR-15-04 (Field Blank)	Methylene Chloride	4500	HAR-15	45000
HAR-07-05 (Trip Blank)	1,2-Dichloroethane Methylene Chloride	0.28 1.1	HAR-07-01 HAR-17-01 HAR-17-02 HAR-17-04	1.4 11
HAR-17-04 (Field Blank)	Methylene Chloride	260000	HAR-17-01 HAR-17-02	2600000
3D23008-BLK1	Methylene Chloride	0.84	HAR-07-01 HAR-16 Comp HAR-17-01 HAR-17-02 HAR-17-04	8.4
3040587-BLK1	Bis(2-ethylhexyl) phthalate	34.7	HAR-07, HAR-16 Comp, HAR-17	350
3D21043-BLK1	Antimony Arsenic Chromium	0.181 0.469 0.19	HAR-07, HAR-17 HAR-07, HAR-17 HAR-15	0.9 2.34 1.0
3D18060-BLK1	Antimony	0.133	HAR-14, SH-04, RS-08	0.665
3D24017-BLK1	1,4-Dioxane	0.81	HAR-07-03 HAR-14-03	4.05
3D22047-BLK1	n-Nitrosodimethylamine	0.00076	HAR-07-03	0.0038
3D24029-BLK1	1,2-Dibromo-3- chloropropane	0.00187	HAR-16 Comp	0.00935
TO31859	Octachloro-p- dibenzodioxin	0.0117	RS-08, SH-04, HAR- 14, HAR-15	0.117
	1,2,3,4,7,8-Hexachloro- p-dibenzofuran	0.0022		0.022
	Octachloro-p- dibenzofuran	0.0072		0.072

GC/MS and ICP-MS Instrument Performance Checks

All performance checks of GC/MS and ICP-MS instruments used in the analysis of the project samples in accordance with EPA Methods 8260B, modified 8260 SIM, 8270C, 8290, and 6020 fell within method specific criteria without exception. No corrective action is warranted.

Instrument Calibration Procedures

Instrument calibration procedures for the analysis of project samples were consistent with the guidelines prescribed by the USEPA method specific calibration protocols with the following exceptions:

During the analysis of volatile organics, the continuing calibration standards for the following target compounds exhibited a percent difference (%D) greater than the accepted EPA guidance criteria of 25%.

Date	Compound	Affected Samples	Qualifier
4/17/03	Carbon Tetrachloride	HAR-14, HAR-15	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/17/03	Allyl Chloride	SH-04, RS-08, HAR-14, HAR-15, HAR-07, HAR-17	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/17/03	2-Butanone	HAR-14, HAR-15	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/17/03	2-Hexanone	HAR-14, HAR-15	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/17/03	Acetone	HAR-14	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/23/03	Propionitrile	HAR-07	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.

During the analysis of semi-volatile organics, the continuing calibration standards for the following target compounds exhibited a percent difference (%D) greater than the accepted EPA guidance criteria of 25%:

Date	Compound	Affected Samples	Qualifier
4/29/03	Benzo (b + k) fluoranthene (total)	HAR-07, HAR-17	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/29/03	Bis(2-chloroethyl)ether	HAR-07, HAR-17	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.

Date	Compound	Affected Samples	Qualifier
4/29/03	Di-n-octyl phthalate	HAR-07, HAR-17	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/29/03	Hexachlorocyclopentadiene	HAR-07, HAR-17, HAR-14, HAR-15	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.

During the analysis of chlorinated pesticides, the continuing calibration verification standards for the following target compounds exhibited a %D greater than the accepted EPA guidance criteria of 20%:

Date	Compound	Affected Samples	Qualifier
4/22/03 11:49	2,4-D, 2,4,5-T, Dinoseb	HAR-14, HAR-15, HAR-17, SH-04, RS-08	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/22/03 21:01	Thionazin	HAR-14, HAR-15, HAR-7, HAR-17, SH-04, RS-08	Flag "UJ" where the target analyte was non-detect and flag "J" for concentrations detected above the reporting limit.
4/22/03 11:49	Dalapon, 2,4-DB, MCPA	HAR-14, HAR-15, HAR-17, SH-04, RS-08	These compounds were non-detects, are not Appendix IX compounds, and are not reported. No corrective action is required.

Surrogate Compound Recoveries

Surrogate compounds were added to each sample prior to analysis to confirm the efficiency of the purge and trap sample preparation procedure by EPA Methods 8260B and modified 8260 SIM, and the extraction and concentration process by EPA Methods 8270C, 8270 Mod, 8081A, 8082, 8141, 8151A, 504.1 and 1625M. The surrogate compound recovery calculated in percentage is presented on each report for the project sample analyses. The calculated recovery of surrogate compounds for each sample fell within method specific acceptance criteria without exception.

Based on the reported recovery performance of the surrogate compounds, no additional qualification of the reported results is recommended.

Laboratory Control Sample (LCS/LCSD) Analyses

Analytical precision and accuracy was evaluated based on laboratory control sample (LCS) analysis performed concurrently with the project samples. LCS analyses included the addition of a known amount of each target analyte into lab pure water using a traceable reference material independent of the instrument calibration materials. LCS samples were analyzed to confirm the precision and accuracy of the analytical system calibration.

The percent recovery calculated for each target analyte fell within laboratory specific criteria with the following exceptions.

LCS Sample ID		%R Criteria	%R	Corrective Action
GCMS34 BS1 4/18/03	Acetone	40-110	188	Flag non-detect results "UJ" and detects "J" as estimated values.
	2-Butanone	40-110	154	
	2-Hexanone	40-110	146	
GCMS BS1/BSD 4/24/03	Benzidine	60-140	26 / 32	
	Hexachlorocyclopentadiene	60-140	7.4 / 7.9	

The data for the remaining analytes indicate that the analyses were conducted with acceptable analytical accuracy and precision. No additional qualification of the data presented for the project samples is recommended.

Matrix Spike/ Matrix Spike Duplicate (MS/MSD) Sample Analyses

Analytical precision and accuracy were evaluated based on the matrix spike and matrix spike duplicate analyses performed on the project samples within each sample delivery group (SDG). After the addition of a known amount of each target analyte to the sample matrix, the sample was analyzed to confirm the ability of the analytical systems to identify these compounds within the sample matrix. Due to limitation of sample volume, some SDGs contained reports of MS/MSD analyses performed on sample matrices from non-project related samples. However, the analysis of these samples concurrently with the project samples provides some valuable information on the accuracy of the analyses performed.

MS/MSD sample analyses performed on project field samples fell within method and/or laboratory derived QA/QC criteria without exception. No additional qualification of the data presented for the project samples is warranted.

Internal Standard (IS) Compound Recoveries

Internal Standard compounds were added to each sample prior to analysis of organic parameters by EPA Methods 8260B, modified 8260 SIM, and 8270C to quantify the amount of the target compounds detected within each sample matrix. The calculated response of each IS compound fell within the QA/QC criteria of +100% and - 50% of the corresponding continuing calibration verification standard without exception. No qualification of the data is recommended.

Sample Data Reporting

Sample data were reported in summary reports containing laboratory specific data qualifiers. When an analysis was performed without dilution the reporting limit was based on the most recent method detection limit (MDL) study conducted by the laboratory. A review of the adjusted reporting limits indicate that when these reporting limit (RLs) values were presented for sample dilution analyses, the RLs were adjusted for the level of dilution performed.

Data Qualifiers

The use of the data qualifiers is intended to aid the data user in the interpretation of the sample results. Laboratory specific data qualifiers were assigned by Del Mar Analytical to the reported results in accordance with the laboratory's standard operating procedures. The data qualifiers used do not correspond with the USEPA guidance referenced in this document. For example, values presented for target compounds detected at concentrations below the reporting limit but above the MDL were flagged with a "B" for inorganic parameters.

As such, the data qualifiers recommended above in accordance with the USEPA National Functional Guidelines guidelines should preclude the use of the laboratory specific qualifiers so that comparability of the reported results can be achieved if future analyses are performed at other laboratory facilities.

Summary of Data Validation Findings

The results presented in each report were found to be compliant with the data quality objectives (DQOs) for the project and useable, with the few exceptions noted above. Based on our review, the data usability is compliant with a completeness goal of greater than 95%.

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